AUGUST · 1955
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PRICE 35 CENTS

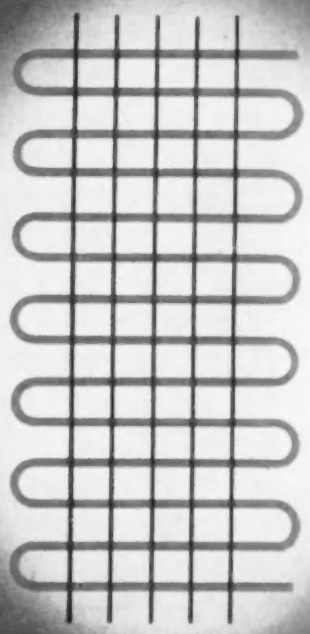
ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

THE ELECTRIC HEATING MARKET:

it's HOTTER than you think

A nine-page article that spells out one distributor's success in selling electric heat . . . . . Starts on page 51



How an Old-Time Salesman Is Breaking in a New Territory . . . . . page 37

What You Can Sell to Laundries and Dry Cleaners . . . . . page 44

APPLETON

"ST" Series CONNECTORS* for Liquid Tight Flexible Conduit

("Sealtite," "Flexon" or Equivalent Products)

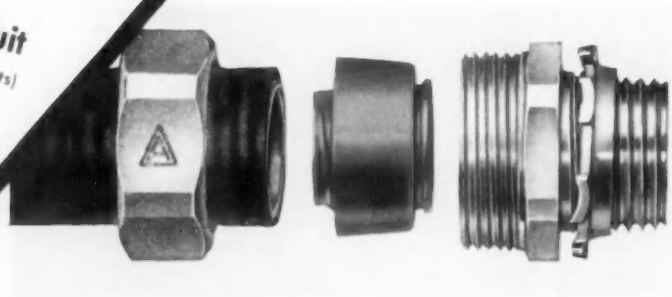
*Patent Applied For

UNIQUE

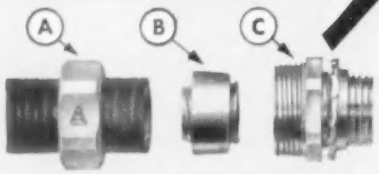
Appleton Construction

No Other Liquid Tight Flexible Conduit Connectors Have The APPLETON Brass Ferrule. Ferrule Screws In and Crimps On For a Perfect Seal and Positive Ground

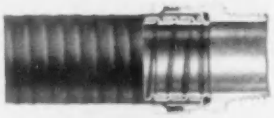
. . . Always!



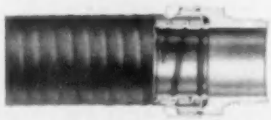
HERE'S HOW THEY WORK:



Slide nut (A) over conduit. Screw ferrule and sleeve assembly (B) into conduit. Tighten nut onto connector body (C).



Completely assembled "ST" connection. (IMPORTANT: nut must be tightened as far as possible to complete compression action which assures liquid-tight seal.)



Cross section of completed connection shows how tapered end of nut compresses ferrule wall . . . seals perfectly and gives positive ground between conduit and connector.

The Only Fittings of their Kind . . . Provide *Positive* Wiring System Protection

● Here are flexible conduit connectors with a big plus! Nothing to come loose, deteriorate, crack or break! Brass ferrule *Appleton* "ST" Series Connectors stay tight to assure positive exclusion of liquids, fumes, chips, shavings and other foreign matter from machinery electrical systems. And since the threaded, brass ferrule is crimped on, there is a *permanent* ground between conduit and connectors that maintains voltage unfailingly within 10 millivolts drop.

Appleton "ST" Series Connectors come straight to fit flexible conduit from ⅜" to 4". Also, 45° and 90° to fit flexible conduit from ⅜" to 2". To avoid costly shutdowns and loss of man hours, due to wiring system failure, *write for full information.*

A QUALITY LINE OF ELECTRICAL FITTINGS ALL FROM ONE SOURCE SOLD EXCLUSIVELY THROUGH SELECTED WHOLESALERS

APPLETON ELECTRIC COMPANY

1734 Wellington Avenue • Chicago 13, Illinois

Also Manufacturers of

Explosion-Proof Fixtures

Unilet Fittings

Industrial Lights

Reelites

Outlet Boxes

Get More Dependable Protection for Motors and Branch Circuits

ECON®

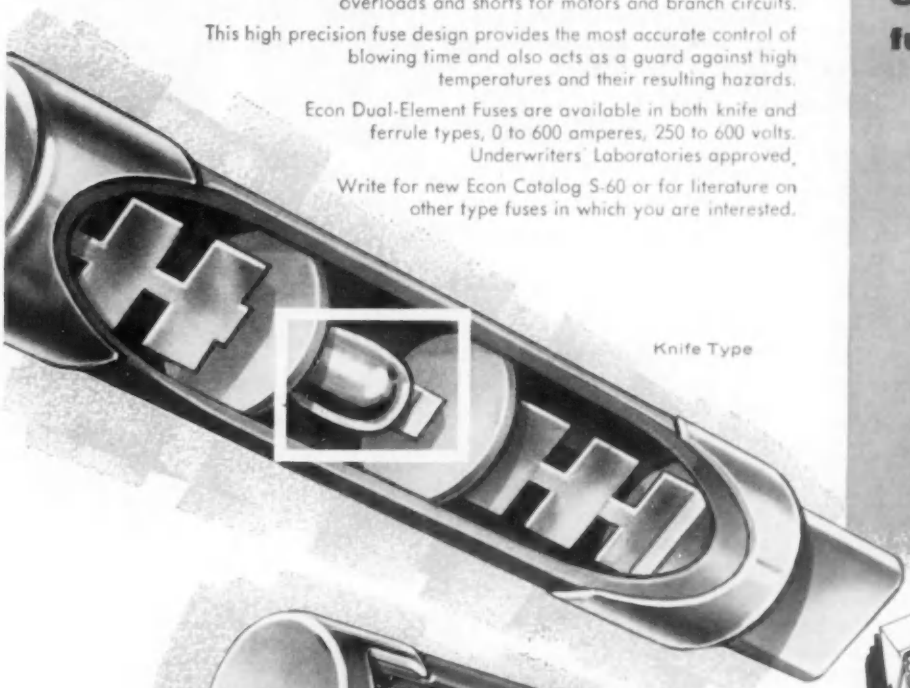
dual-element cartridge fuses

The exclusive Econ-Alloy thermo element in Econ Dual-Element Cartridge Fuses has the property of changing from a solid to a liquid without going through a plastic state. We utilize this property to assure you more uniform protection against overloads and shorts for motors and branch circuits.

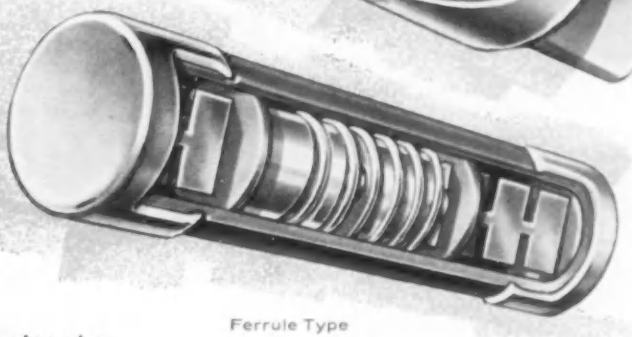
This high precision fuse design provides the most accurate control of blowing time and also acts as a guard against high temperatures and their resulting hazards.

Econ Dual-Element Fuses are available in both knife and ferrule types, 0 to 600 amperes, 250 to 600 volts. Underwriters' Laboratories approved.

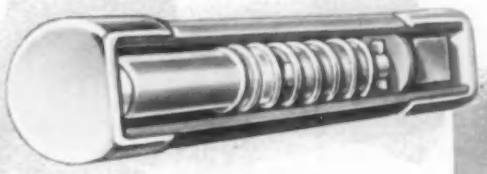
Write for new Econ Catalog S-60 or for literature on other type fuses in which you are interested.



Knife Type



Ferrule Type



electrical wholesalers

Econ Dual-Element Cartridge Fuses give you more dependable protection against sales lost, due to not being able to supply these more reliable fuses for industrial and commercial use. Be prepared with an adequate stock to meet the demand for ECON that we are creating with advertisements like this in electrical trade publications.

ECONOMY fuses for every purpose

ECONOMY FUSE & MFG. CO., 2717 Greenview Ave., Chicago 14, Ill. 917EW

LETTERS TO THE EDITOR

EW welcomes expressions of opinion from readers. Address all correspondence to: The Editor, Electrical Wholesaling, 330 W. 42nd St., New York 36, N.Y.

Liked "Basic Dimensions"

Dear Sir:

Congratulations on the wonderful job you did in getting the necessary information and publishing the data included in your article, "The Basic Dimensions of Your Industry."

This is a terrific job and one that will be very valuable to us and it should be to the rest of the electrical industry also.

Congratulations again.

A. A. TOGESEN
VICE-PRESIDENT
BULLDOG ELECTRIC PRODUCTS CO.
DETROIT, MICHIGAN

• *Reprints of "The Basic Dimensions of Your Industry" can be had by writing to ELECTRICAL WHOLESALING, 330 West 42nd St., New York 36, N. Y. The price: 30¢ a copy.*

You're Welcome

Dear Sir:

Thanks most sincerely for the very clever article entitled "Lost Department" in the July issue of ELECTRICAL WHOLESALING (p. 90).

I was willing to offer a reward of $100 for the return of our adequate wiring campaign book, but frankly, I think your "Lost Department" item will probably bring more productive results than even a reward. We shall never be contented until the book is returned, or at least find some evidence why it was taken.

If we get any reply to your very thoughtful item, I assure you we shall notify you at once.

JOHN M. NEWTON
PRESIDENT
OAKES ELECTRICAL SUPPLY CO.
HOLYOKE, MASS.

Think "Top" is Tops

Dear Sir:

I think your department "Top of the News" is very good. It gives the reader a quick summary of the top news at a glance.

Frankly it is the first thing I read when my ELECTRICAL WHOLESALING arrives in Houston.

FRANK DEWALCH
EXECUTIVE VICE PRESIDENT
SOUTHERN ELECTRIC SUPPLY CO.
HOUSTON, TEXAS

Dear Sir:

We find "Top of the News" very interesting and informative. We read it thoroughly, and think it should be continued.

CAREY SCHNEIDER
SALES MANAGER
CHILLICOTHE ELECTRIC SUPPLY CO.
CHILLICOTHE, OHIO

Information Please

Dear Sir:

In the fall of last year we requested full information on electrical distributors' warehouse arrangements, floor-planning, etc. You were kind enough to mail us this information, which, by the way, has been very helpful.

Our very good friend, Mr. Will White, of P & W Electric Supply Co., Columbus, Georgia, has a need for the same type information. . . .

M. J. SHARKEY
MGR., ELEC. DEPT.
UNION SUPPLY CO., INC.
TALLAHASSEE, FLA.

• *This material is on its way to Mr. White. If other readers have need for similar material on warehousing layouts and ideas, please refer to the Nov. '53 issue of EW ("Outstanding One-Floor Operations"); the March '54 issue ("Outstanding Multi-story Operations") and the article "38 Operating Ideas That Can Work For You" (EW—May '54, p. 106). For additional information, write to ELECTRICAL WHOLESALING, 330 W. 42nd St., New York 36, N. Y.*

COMING NEXT MONTH: A big lighting section in two parts: 1) "A Certified Lighting Tale of Two Cities" will highlight the distributor's role in a new program designed to open up the large commercial and industrial lighting markets. 2) "A Special Report on Residential Lighting" is a comprehensive analysis of this problem product which will pinpoint trends in selling, purchasing, stocking, merchandising, etc.

This ad appears this month in...

Electrical Construction and Maintenance
Electrical South
Electrical Manufacturing

ADS LIKE THIS every month
. . . plus DIRECT MAIL
. . . plus PRODUCT SAMPLING
explain and point out T & B product features.

REMINDS your customers, that T & B products are available only from you . . . our authorized distributor. T57

General Sales Manager

The THOMAS & BETTS CO.
Incorporated

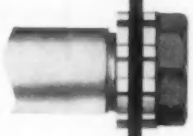
insulined

THE NEW CONCEPT IN FITTINGS THAT REDUCES WIRE PULLING EFFORT UP TO 50%

Insulating Bushing

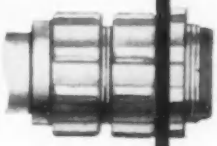
Insulated Metallic Bushing*

Insulated Chase Nipple



STANDARD RIGID CONDUIT

Insulated EMT Connector



ELECTRICAL METALLIC TUBING

Insulated Tite-Bite Connector — straight

FLEXIBLE CONDUIT OR ARMORED CABLE

Insulated Tite-Bite Connector — 90°

*available soon

Look for the bright blue "insulined"!

ANOTHER NEW T&B ENGINEERED EXCLUSIVE —
The First Line of Self-Insulated Raceway Fittings! Just look at the many benefits you get with these new "insulined" fittings.

They are the *EASIEST* to Install

Factory-assembled, the Insuliner is a permanent part of the fitting — it can never come loose or pull out. The slippery insulined throat cuts pulling effort by as much as 50%.

They make the *SAFEST* Installation

Because of the nationwide accent on safety, the trend is toward insulated fittings in all locations. Insulated bushings are standard fittings today. Extremely tough they are unaffected by common acids, solvents, moisture or fumes.

They make the *MOST ECONOMICAL* Installation

A one-piece fitting makes installation fast and easy for maximum on-the-job savings. There is no need to add a separate insulating bushing.

They give the Installation a *QUALITY LOOK*

Strong, longer bodies and heavy lock nuts . . . 100% visibility . . . accurate threading . . . all of the features you've come to expect in a T&B engineered fitting.

Write for free samples and technical data or contact your nearby T&B Distributor.

LOOK FOR THIS SIGN — AUTHORIZED DISTRIBUTOR T&B ENGINEERED

IT'S THE MARK OF AN AUTHORIZED T&B DISTRIBUTOR
The complete line of T & B fittings for conductors and raceways is sold only by recognized electrical wholesalers. It's our way of assuring you the service and savings of a friendly local source. Call him for all your electrical needs. T58

UL — All T&B insuline fittings bear Underwriters Laboratories Approval

THE THOMAS & BETTS CO.
INCORPORATED
20 Butler Street • Elizabeth 1, New Jersey
Thomas & Betts Ltd., Montreal, P.Q., Canada
MANUFACTURERS OF QUALITY ELECTRICAL FITTINGS SINCE 1898

SQUARE D COMPANY
ELECTRICAL EQUIPMENT
TRINITY 2-0400 6060 RIVARD STREET, DETROIT 11, MICHIGAN

August, 1955

memo
TO OUR DISTRIBUTORS

Every successful business is a team operation. All the players on the team must be on their toes or the total effort will suffer. You don't find many businesses getting very far on the performance of a few isolated stars.

That's why our Field Engineers try to work closely with all the people in your organization. One particularly important (and frequently overlooked) person is the COUNTERMAN. His constant contact with the trade and his influence with customers should never be underestimated. He has great influence with us, too. Few men in your organization are in better position to evaluate the market acceptance of a product. When your counterman talks, we listen.

We consider it a part of our job to help the counterman do his job better. How? By continual training in our products and their proper application. But while our Field Engineers are fulfilling this assignment, their attention to the other members of your team must not diminish. Which is another way of saying "teamwork--it's beautiful!"

As competition increases, counter business becomes more important to consistent volume and healthy profit structure. This is a toast to the COUNTERMAN--a strong candidate for this year's most valuable player award.

Yours very truly,

SQUARE D COMPANY

W. H. Younger

W. H. Younger, Manager
Merchandise Sales & Advertising

WHY:mbw

ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

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(with Wholesaler's Salesman)

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WHOLESALING

AUGUST, 1955

Print Order This Issue: 11,875

Breaking In a New Territory . . . . . **Thomas M. Cassidy** 37
Here's what it means for South Bay Electric's veteran salesman, Joe Ball.

How They Broke Their Traffic Strangle . . . . **George D. Farley** 40
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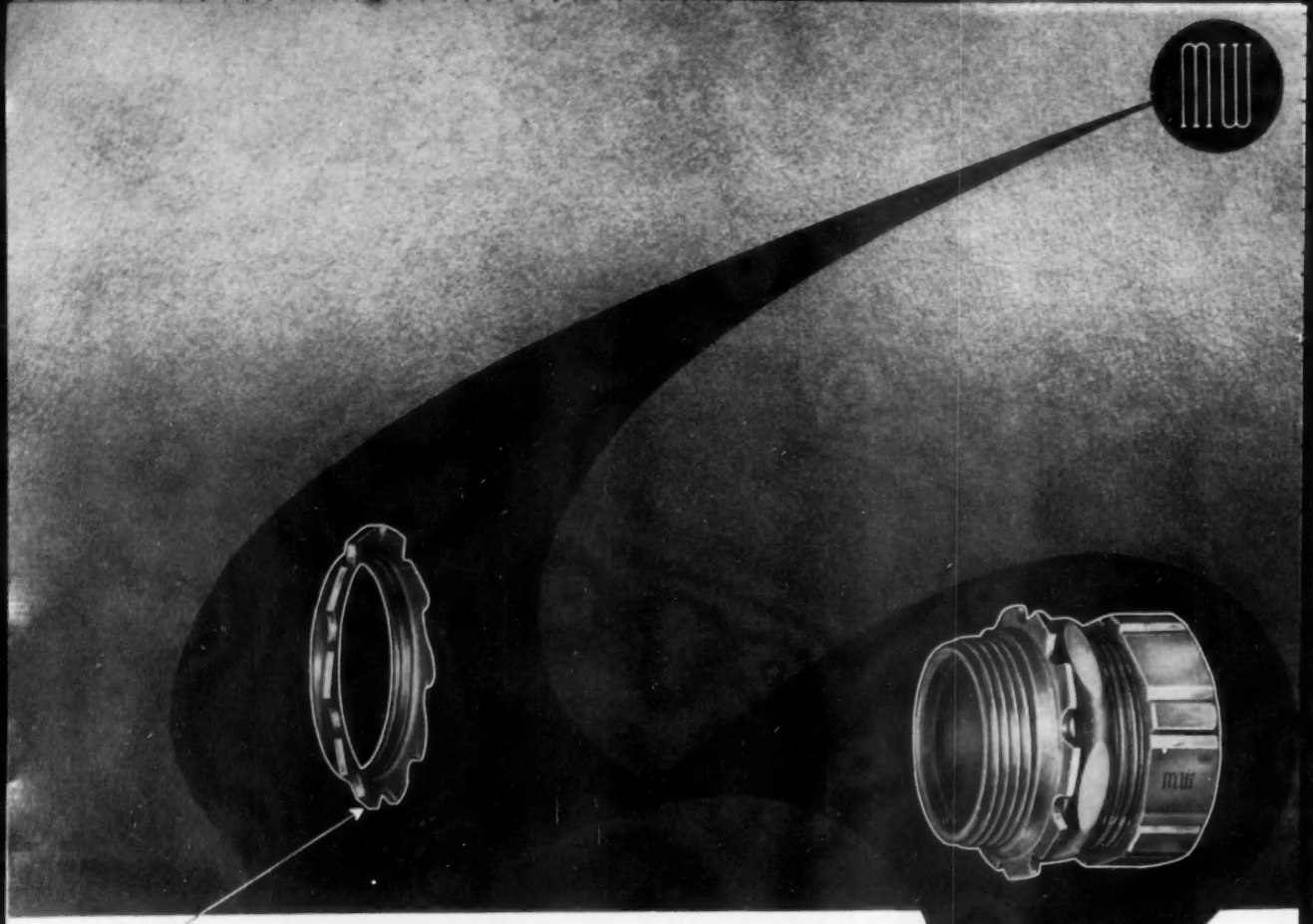
Next Month: Two Special Reports on Lighting

Member ABC and ABP



- Multiple locking edges for greater bond. Assures positive ground for electrical system.
- Spring tension against locking surface provides permanent shake-proof installation.
- Reverse bevel on inner surface permits bonding edges to be pulled up tight to locking surface.
- Up to 66% more driving notches for easier working angle, when tightening.
- Heavy gauge steel. Cadmium plated for corrosion protection.

COMPARE THESE midwest LOCKNUT FEATURES...

These "Sure Bond" Locknuts are specifically designed to do a better job. Compare these features against those of other types of locknuts. All Midwest fittings, 2" and smaller, come equipped with "Sure Bond" locknuts.

★ Here is another Midwest development in providing quality fittings. "Quality" is just a condensed way of saying: "Getting the total job done—right—with the most inexpensive combination of material and man hours." Engineering and producing quality fittings to meet the highest standards of electrical wiring installations, is our objective at Midwest.

Midwest Electric Mfg. Company

MANUFACTURERS OF ELECTRICAL WIRING PRODUCTS

1639 W. WALNUT STREET

Chicago 12, Illinois

Lighting Fixtures

The Steber Manufacturing Co., Broadview, Ill.

All aluminum horizontal fluorescent "T" lighting fixtures are available in 4-ft. and 8-ft. lengths. They may be used individually or joined end to end to provide continuous strips of any length in multiples of four feet. A feature is a center section comprised of heat treated interlocking aluminum extrusions forming a box girder designed for strength and rigidity. Fixtures are called "Skyliners".

Luminous Ceiling

Luminous Ceilings, Inc., Chicago 47, Ill.

The "Electra-Luminous Ceiling" is a completely wired electrical package combining lighting sources and ceiling as one, according to the manufacturer. The system converts the suspension system to a light source raceway. The track for plastic panels converts to the wireway. The entire system locks in to a pre-punched steel structural member, fastened to, or suspended from, the true ceiling or slab.

Transformer

Jefferson Electric Co., Bellwood, Ill.

Direct burial constant wattage transformer is sealed in a rubber case and is for use on multiple mercury lamp circuits. By burying the transformer in the ground the pole base can be eliminated. The transformers may be used for airport lighting systems, and for street, highway, parking lot and other outdoor lighting systems. Manufacturer says that since the transformers are completed sealed, they require virtually no maintenance.

Fluorescent Fixtures

H. E. Williams Products Co., Carthage, Mo.

The most unusual feature of the "Series 8000" fluorescent fixtures is in the illuminated metal side panels. When pendant-mounted, the semi-direct unit projects about 40 per cent of its light upward and 60 per cent downward. A small part of the upward component is reflected by baffles onto the side panels causing them to glow. This is claimed to make for an effect similar to translucent glass or plastic side panels and reducing harsh contrasts between sides and lighted bottom area. For flush mounting, the fixtures can be equipped with reflector sets for 100 per cent down lighting.

Tapes

The Okonite Co., Passaic, N.J.

Cable splicing tapes are for use with standard steam or electric vulcanizers. Complete line includes rubber insulation, rubber sheath and colored neoprene sheath tapes. The tapes are supplied in a standard one-inch width. The rubber insulation tape is grey and the rubber sheath tape is black. The neoprene sheath tape is available in black, red, yellow and green for easy identification and color-coding.

Lighting Fixture

Markstone Manufacturing Co., Chicago 18, Ill.

Incandescent square lighting fixture is surface mounted and measures 3½ inches from the ceiling. The new-style fixture is 9-inches square and is available in three metal finishes—black, brass or triple chrome plated. The fixture accommodates two 60-watt incandescent lamps. U.L. approved.

Cord Set

General Electric Co., Bridgeport, Conn.

Flexible cord set, for room air conditioners, is made of thermoplastic insulating material. The cord set is similar in appearance to the rip-cord type but differs in that the green grounding conductor is nested between the other two conductors.

Reflector Lamp

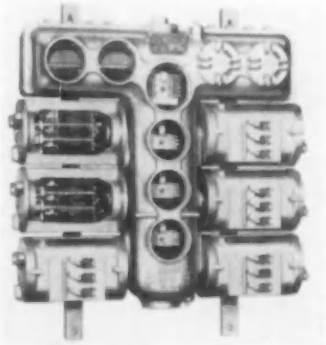
Westinghouse Electric Corp., Bloomfield, N.J.

One thousand-watt reflector lamp for industrial use operates on a standard 120-volt circuit. Because of its internal reflecting surface it is said to be ideal for high-bay lighting. The lamp, designated as R-57 is the same size as the 800-watt lamp. However, design improvements are claimed to have made possible an increase in lighting output without a corresponding increase in bulb size. Rated life is 2,000 hours. Its initial light output is approximately 15,500 lumens.

Tape

Bishop Manufacturing Corp., Cedar Grove, N. J.

High-voltage splicing tape is said to incorporate all the features desirable for the new ozone resistant power cables. These cables operate at higher conductor temperature ratings of 85° C, up to and including the 15,000 volt range. It is recommended for use on all cables insulated with ozone resistant compounds and operating at 2,000 volts or more.



Panelboards

The Pyle-National Co., Chicago 51, Ill.

New design in cast aluminum circuit-breaker panelboards for hazardous locations has been announced. A triple-sectioned grooved joint meshes cover, end plate and body, to form a continuous metal-to-metal explosion proof seal. Approximately three turns of the end plate releases the cover, which lifts off, allowing visibility and access to the branch circuit breakers and all factory made connections. Inspection and maintenance therefore can be done from the front. Two or more panel-

boards may be installed side by side on close centers. Available in 2, 4, 6 and 8 gang types. They take "E" frame and "Quicklag" circuit breakers with from 2 to 24 branch circuit controls.

Cord

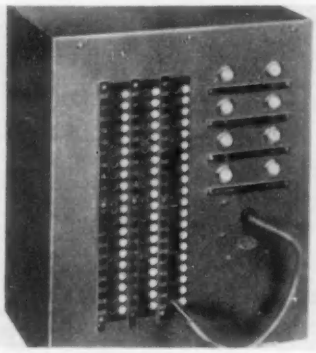
United States Rubber Co., New York 20, N.Y.

Electrical cord is claimed to have a service life three times longer than present highest quality cords. It is for use with grinders, drills, power saws, buffers, and other heavy duty portable electric tools. The cord is claimed to have 488 per cent greater resistance to flexing, is 118 per cent more resistant to tearing, and has 197 per cent greater impact strength than comparable cords.

Bin Lights

Jones Metal Products Co., West Lafayette, Ohio

Light is directed to each side of aisle and bin, or shelf interiors are illuminated from top to bottom by the new bin light. Shielding at each end of the unit prevents glare along the length of the aisle. The lights are furnished in all white titanium porcelain enamel, both inside and outside. Available for pendant or outlet box mounting, and in 100, 150 and 200-watt lamp sizes.



Annunciator

Auth Electric Co., Inc., Long Island City, N.Y.

Return call annunciator unit has a 180 station capacity and measures only 12-in. wide by 15-in. high. Manufacturer states that this is an advancement over conventional type annunciator systems which measure about three feet in both width and height and have a capacity of about 100 stations. The unit can be either surface or flush mounted. The relay cabinets can be remotely located.

Silent Switches

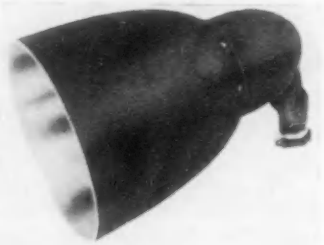
Circle F Mfg. Co., Trenton, N.J.

Almost completely silent switches operate without mercury or other fluids. The "No-Klik" switches have silver contacts. Not down rated, they are said to offer lifetime performance and operate in any position for both incandescent and fluorescent lamp loads. The mechanism is totally enclosed with large head no. 8 binding screws. The switch takes any wire size up to number 10.

Lampholder

McGill Manufacturing Co., Inc., Valparaiso, Ind.

Phenolic lampholders are designated the "Levolier 4600" series. This series features a flared top to accommodate an inverted glass globe for indirect lighting and is claimed to be all that is required for dependable, two-circuit operation of three-light lamps.



Bullet & Fittings

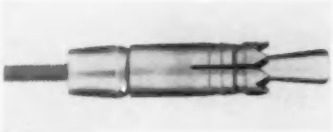
Rab Electric Manufacturing Co., Inc., 605 E. 132nd St., New York 54, N. Y.

Jet black weatherproof bullet is made of non-rusting aluminum throughout. It accommodates Par-38 and R-40 lamps. The unit has elliptical holes at the base of the shield to allow a passage of cooling air, drainage of trapped moisture, and a small amount of "uplight." The unit is matched with aluminum fittings in black-wrinkle finish.

Grounding Adaptor

John I. Paulding, Inc., New Bedford, Mass.

Power tools, appliances and other equipment with 3-wire, U-blade ground caps can be operated from standard 2-wire outlets with an adaptor according to the manufacturer. The no. 65 grounding type adaptor is equipped with a green 3-in. thermoplastic insulated ground lead. One of the two parallel contact blades is cadmium plated for positive identification. The molded, all Bakelite unit is rated for 15 amp., 125 volt, and is U.L. listed.



Expansion Shell

J. D. Polis Manufacturing Co., Chicago 23, Ill.

Stud-bolt expansion shell is available in six standard bolt sizes. The "Bulldog series 600" can be installed with either an electric or air hammer for all types of anchoring work in concrete and masonry construction. Manufacturer says it is a "double action" anchor, being both a masonry drill and anchor in one.

Window Fan

Frigid, Inc., Brooklyn 32, N.Y.

Electrically reversible, push-button window fan has six speeds. Exclusive automatic thermostatic control. Twenty-inch aluminum propellers; 3,520 cfm; 600, 800; and 1,000 rpm Adjustable for windows from 28 to 34 inches. Sixty cycle, 110 volts, a.c.

Winder

Ideal Industries, Sycamore, Ill.

Fish tape winder is said to easily attach to any Ideal fish tape reel. As the winder handle is pulled around the reel, a wheel spreads the reel housing and allows the fish tape to wind or unwind. Double rollers traveling around the inside diameter of the reel hold the winder firmly in place as it is rotated around the reel.

Lighting Fixture

John C. Virden Co., Cleveland, Ohio

Pull-down lighting fixture hides its reel in a canopy. The fixture pulls down 53 in. from the ceiling, reels up 33 in. to serve as a ceiling light. The 18 in.-hood is finished in either brass, copper, pink, white or black.

Chimes

Edwards Co., Norwalk, Conn.

New line of chimes features the "Hideway". Only two inches deep, the unit can be installed between the studs of any wall, even modern shallow walls, according to the manufacturer. The flush-mounted, plain face unit can be painted or decorated to match the surrounding wall. Dimension: 8 by 6 by ¾ inches.

Continued on page 104

. . . We liked it so well that we ordered another.
Refrigerator Service Co. Dunmore, Pa.

. . . The handiest and most useful instrument I've got. It's light, small and easy to carry around.
Bailey's, Charleston, S. C.

. . . Best investment ever made. In the first six months, two jobs it helped me get paid for it.
George Koff, Philadelphia, Pa.

. . . Very satisfactory. It is easy to check motor current as jaws will let Amprobe work inside terminal box.
Moore Electric Motor, Brady, Texas

. . . Very handy — can use it in small switches and without any shut-down time.
Walter Baker Div. Gen'l Foods Dorchester, Mass.

. . . Far superior to any instrument of any type performing same service . . . it is a "must" item to electrician.
Culy Refrigeration Service Richmond, Ind.

That's why they ask for the AMPROBE

Now you can offer your customers a full-line of Amprobe and Amprobe Junior snap-around volt-ammeters. There's one for every job, every budget. Seven Amprobe Junior models – with ammeter ranges of 0-10 to 0-100 sell at only $19.85. Three Amprobe models – with ammeter capacities to 300, 600, or 1200 – sell at $49.50, $59.50 and $67.50 respectively. Amprobe, the world's fastest selling snap-around volt-ammeter, is sold *only* through the distributor. Send today for the new Amprobe full-line catalog. Write to: Pyramid Instrument Corp., Lynbrook, N. Y.

TOP OF THE NEWS . . . and its significance to you

The hard way

West Milton, N.Y. was the scene where, for the first time, nuclear energy was used to generate electricity which was sent into commercial channels. The power, 10,000 kilowatts of it, came from a reactor built two years ago by G.E. It was initially designed to test a prototype of the power plant installed on the second atomic sub "Sea Wolf." The power is on lines of the Niagara Mohawk Power Corp., which has a 2,500,000 kilowatt capacity. No one could tell who actually received the atom-generated power except for those receiving it directly at the reactor installation. Rumor has it that a housewife was the first to use atomic power. She cooked a hamburger.

What's ahead—a fair picture

A brief examination of the outlook for 24 individual industries has been assembled by the McGraw-Hill department of economics. Though done in broad strokes, the information does give a fair picture of the general business outlook for the months ahead. The 24 industries are discussed on the News For The Industry page.

Rigid conduit policy now in effect

Quantity differential and factory shipments are the subjects concerned in a new merchandising policy for rigid conduit announced in July by the Rome Cable Corp. The company said that it was establishing quantity price differentials with all orders entered on and after July 11, 1955, to overcome the extra cost to Rome Cable, and to encourage its distributors to fulfill their function of stocking and shipping. The new policy is detailed on page 96.

Odd number prices

One radio manufacturer has decided to end a long time industry device of ending retail prices in odd numbers—$19.95—$49.95. The Emerson Radio and Phonograph Co. is also said to be taking steps to provide uniform prices which would be made possible by the manufacturer's prepayment of freight charges.

Don't call me, I'll call you

"It shall be unlawful for any person to solicit a sale of merchandise or service by use of telephone when not invited by the one solicited." That's a new ordinance which will go into effect September 2nd in Portland, Ore. The ban is supposed to be one of the toughest in any city. Offenders are liable to fines up to $500 or 180 days in jail. It is reported that the ordinance was directed mainly at real estate, insurance, auto, and newspaper want ad salesmen.

Wide coverage

Nine local Certified Lighting Bureaus are now in operation, or are being formed, from coast to coast and border to border. Detroit and Fort Worth are the latest additions. Detroit starts a Certified Lighting Program in the fall.

Copper shortage growing

Labor troubles continue to cut into the already short copper supply. No sooner were American mines and plants back into full production than another serious strike erupted in a big Anaconda mine in Chile. European consumption of copper continues high. The shortage will continue for some time to come and is beginning to be felt hard. General Cable Corp. closed all of six plants for at least two weeks in July. Rome Cable Corp. operated at about three days a week most of last month. Other wire makers are starting vacations sooner or are going on shortened work weeks.

Wages at high point

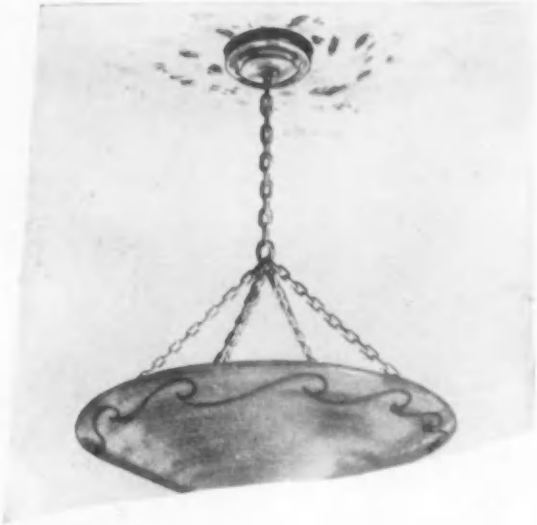
Hourly wages are now running at an average of $1.87—six cents above a year ago. The work week has increased to 40.7 hours and weekly wages are hovering around a new high of $76.11. This is seven per cent higher than this time a year ago.

New distributor policy

Nesco has announced what it calls a new selected electrical distributor policy. The appliance maker says that the new policy is to select one electrical distributor and one hardware distributor in each market area who will distribute Nesco houseware products in that market. Details on page 98.

10 SECONDS

COULD HAVE SAVED A $50,000 CUSTOMER



The job was perfect . . .

MR. WHOLESALER—
HERE'S HOW ACCURATE IS HELPING YOU SELL MORE TAPE TO MORE CONTRACTORS AND INDUSTRIAL PLANTS.
USE THE COUPON BELOW AND GET THE WHOLE STORY WE'RE TELLING YOUR CUSTOMERS.

One of a series appearing in Qualified Contractor, Electrical Const. & Maint., Contractors' Electrical Equip., Electrical Equipment, Electrical South.

. . . about a tape that sticks where it is supposed to and will not smudge off on hands.

Send today for your ACCURATE 10 SECOND TEST KIT . . . no claims, no hearsay . . . the proof is in the product for you to see.

ACCURATE TAPE

ONE PLANT . . . ONE PRODUCT
ELECTRICAL TAPE

FRICTION TAPE
RUBBER TAPE
PLASTIC TAPE

ACCURATE MFG. CO.
51 Hepworth Place, Garfield, New Jersey

Please send me, without obligation, an ACCURATE 10 SECOND TEST KIT.

NAME _____
FIRM _____
ADDRESS _____
CITY _____ ZONE ____ STATE _____

151-S

Testing Noise Levels

SORGEL transformers are known and chosen for their quiet operation, because their noise level is well below the established standards.

Because of their quiet operation, SORGEL transformers are particularly adaptable for indoor installations — in hospitals, schools, institutions, libraries, office buildings, stores, and other structures where low noise levels are an important factor.

Our new testing laboratory, with modern, complete testing equipment and facilities, enables us to know what the efficiency, noise level, temperature rise, and performance of SORGEL transformers are before the installation is made.

The liberal design of SORGEL transformers also results in high efficiency, long life, and a liberal overload capacity for emergencies.

SORGEL transformers are available in a large variety of sizes and types for every purpose. ¼ Kva to 2500 Kva single phase. 1 Kva to 3000 Kva 3-phase. All standard voltages, such as 120, 208, 240, 480, 600, 2400, 4160, 4800, 7200, 13,200, and up to 15,000 volts, and any intermediate or special lower voltages.

SORGEL dry-type or Askarel-cooled transformers are also incorporated in substations. Available with any type or make of switchgear, or from any substation manufacturer.

SORGEL transformers are also regularly advertised in

Electrical World—Electrical Construction and Maintenance—Electrical Engineering—Qualified Contractor—Electrical Equipment—Chicago Electrical News—Electrified Industry—Power Equipment—Electrical South—Industry and Power—Electrical Inspectors' News Bulletin—Thomas Register—Conover-Mast Directory

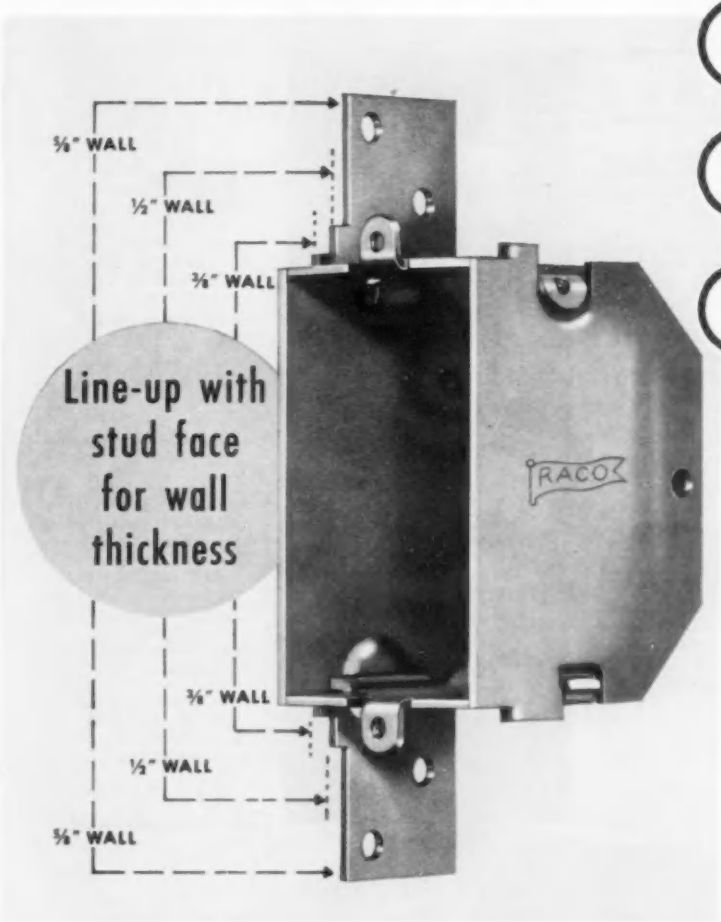
SORGEL ELECTRIC CO., 832 West National Ave., Milwaukee 4, Wisconsin

40 years' experience in the development, manufacturing and application of transformers

ONE SWITCH BOX FOR EVERY TYPE OF WALL

NEW VERSATILE RACO #491 BOX

FOR DRY WALLS! FOR PLASTER WALLS!

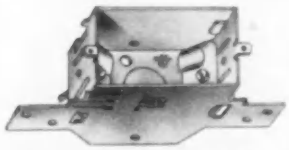


1. PLACE ON STUD
2. LINE UP MARKS
3. NAIL IT DOWN

INSTALLED TRUE AND SQUARE . . IN A FEW SECONDS

Two Nails Will Hold!

Five Nails For Most Rigid Mounting!



Bracket is integral part of box side

Save time and money on every job with this new, versatile Raco No. 491 Switch Box. Self-gauging Raco D Bracket aligns box true and square. Bracket and box are one-piece for added strength . . . non-gangable. A roofing nail in each end of the bracket and a 16-penny nail through the box hold it solid for installing rock-lath.

WRITE FOR FURTHER INFORMATION

"A RACO BOX FOR EVERY NEED"

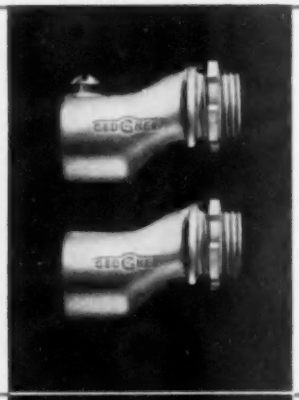
ALL-STEEL EQUIPMENT INC. Aurora, Illinois

SELL ROCK-BOTTOM INSTALLATION COSTS...

SELL GEDNEY!

GEDNEY FITTINGS are machined and threaded with utmost accuracy... smooth-finished, with no metal particles or burrs... made of malleable iron to eliminate breakage... individually inspected to ensure absolutely top quality. That's why they're quickest, least costly to install... why they win customers for you and bring the repeat orders that are the backbone of business profits.

Gedney 90° Pull-In Ells and Adapters with Neoprene gasketed cover and self-retaining screws. These fittings may be used to convert a straight box connector into a 90° connector, or as a 90° box connector for rigid standard pipe coupling. Ells have female threads at both ends. Adapters have male threads at one end and female at the other. Made of malleable iron and cadmium plated. Sizes ½" to 2".

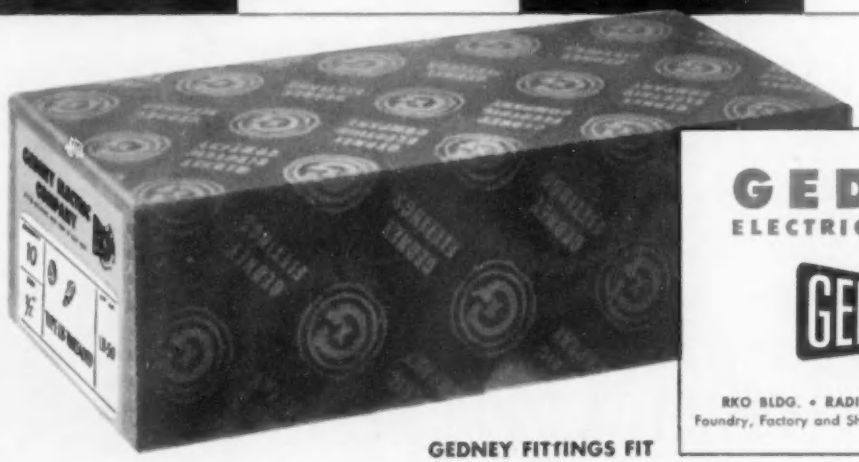


Gedney Offset Connectors—eliminate the necessity for offsetting conduit at knockout entrances of standard boxes. Threaded for rigid, set screw for EMT. Made of malleable iron, cadmium plated, in sizes from ½" to 2".

Gedney Corner Pull-In Elbows are outstanding for space saving, machine wiring, easy wire pulling. Malleable iron, cadmium plated. Made in ½", ¾", 1", 1¼", 1½" and 2" sizes.

Gedney Offset Coupling—female both ends—for use as an offset between boxes. Can also be used with conduit nipple (Gedney 7-50 series) to give more room in box than otherwise possible.
Gedney Offset Nipple, male both ends.

Both of these fittings are made of malleable iron, cadmium plated. Available in sizes from ½" to 2".



GEDNEY FITTINGS FIT

GEDNEY
ELECTRIC COMPANY

RKO BLDG. • RADIO CITY • NEW YORK 20
Foundry, Factory and Shipping Point: Terryville, Conn.

Sangamo Time Switches make *everybody* happy!

your customer's customer

The lights in this retailer's store windows are turned on and off by a Sangamo Time Switch. He doesn't know a hysteresis motor from a base on balls—but he does know he hasn't had any switch trouble with his display lights (because Sangamo Time Switches give unfailing on-off control).

your customer

... if you sell him Sangamo Heavy Duty Time Switches for all his jobs. They're rugged, well-made time switches ... will stand rough handling. And once Sangamo Heavy Duty Time Switches are in, your customers never have any service calls on them.

AND ESPECIALLY YOU...

the Sangamo wholesaler!

You make more money on Sangamo Time Switches. They're easy to sell because they're backed by the biggest advertising program in the industry. And Sangamo Time Switches stay sold. Customers come back. Customers come back again and again for dependable Sangamo Heavy Duty Time Switches. Write for information on the complete Sangamo line.

SANGAMO

ELECTRIC COMPANY

SPRINGFIELD ILLINOIS

ST55-6

Red Throat

B-M 21 B, THE NEW INSULATED THROAT INDENTER CONNECTOR FOR E. M. T.

Four Ways Finer

1. Protruding rounded red plastic lip of bushing prevents cutting of insulation—eliminates shorts.
2. Full thread screws into all conduit fittings. Lip of RED THROAT bushing protects thread from damage.
3. Deep dished eight pronged lock nut is easier to drive on—screws flush to shoulder and digs into metal of box for vibration proof positive ground.
4. Permanent locked-in bushing insures smooth burr-free raceway for easy fishing. No extra work and costs no more.

Briegel, the Original Indenter Fittings are neater in appearance, easier and faster to use. Installation is simple and less expensive. Two quick squeezes sets them forever. Try B-M Indenter Fittings and get more profits from each job!

ALL BRIEGEL FITTINGS ARE U. L. APPROVED AS CONCRETE-TIGHT

Order from Your Wholesaler!

All B-M Indenter Fittings are U.L. Approved as concrete-tight and for general use (File Card E10863). Also comply With Federal Specifications W-F-406.

BRIEGEL METHOD TOOL CO.

GALVA • ILLINOIS

Warehouse Stocks in Principal Cities for Immediate Delivery!

Wherever quiet is essential...

THE NEW LEVITON

QUIET SWITCH

For bedrooms, sickrooms, nurseries, libraries, hotels, hospitals and other places where "peace and quiet" are essential . . . the new Leviton QUIET SWITCH is just what is needed.

A lifetime switch that is tops for quality, reasonable in price and modern in quiet action. Everyone will be switching to the new Leviton Quiet Switch . . . cash in on the big demand for electrical wiring modernization.

Available in single pole, double pole and 3-way . . . in either brown or ivory phenolic. Rating 15A 125-277V AC only. Meets UL and CSA specifications. Write for descriptive literature.

Your best jobs are done with ... LEVITON

LEVITON MANUFACTURING COMPANY – Brooklyn 22, N. Y.
Chicago, Los Angeles, Leviton (Canada) Limited, Montreal

For your wire needs, contact our subsidiary AMERICAN INSULATED WIRE CORPORATION

One of G-E display aids is a 4 foot high cut-out of Pug and Slug.

SNATCHING DOESN'T PAY!

...except when you tie in with the big G-E Bulbsnatching Promotion, and then... *WOW!*

NOW'S the time to make your plans for the hottest anti-bulbsnatching promotion General Electric has yet launched! Starting October 1, full page ads in READER'S DIGEST, SATURDAY EVENING POST and LIFE will reach the consumer and 2-page spreads will appear in eight trade magazines your customers read!

Your salesmen will have plenty of good display material to work with, including the four-foot-high cut-out shown at left. Here's a fine opportunity for your profit-minded customers to plan extra displays on G-E bulbs.

A good time to go after new dealers, too. Look what you have to offer. General Electric bulbs are the most wanted brand of light bulbs in America as proved in recent side-by-side sales tests against a competitive brand, and as evidenced by recent surveys showing that G-E bulbs are used in 95% of all American homes.

And for an immediate boost to bulb sales, during the big October bulbsnatching drive, have your salesman take one minute on every call to show the display material and ask the store manager to use it. Then *watch* your bulb sales boom!

GENERAL ELECTRIC

HERE'S THE BACKING YOU GET!

FULL PAGE ADS in READER'S DIGEST, SATURDAY EVENING POST and LIFE.

FREE DISPLAY MATERIAL—cut-outs, streamers, banners, bulbholders, tuck-in cards.

SKIMPY WIRING

"Dead End" Kid of the Electrical Business!

"DEAD END" KID OF THE ELECTRICAL BUSINESS!

Here's what Kennecott is doing about that problem child — SKIMPY WIRING!

You know this evil little fellow. He's causing the biggest headache in the electrical business today. As far as *you* are concerned, he's both your enemy and a potential friend!

On one hand, Skimpy Wiring puts a damper on the sales of *your appliance dealers.* Skimpily-wired homes aren't even fit to handle the appliances they have now.

On the other hand, Skimpy Wiring is actually the biggest chance *your contractors* have for extra re-wiring business today!

Trouble is, most homeowners don't even recognize Skimpy Wiring in their own homes. When their appliances don't work, they blame the appliances, not the wiring. And they don't re-wire until they're *sold* on re-wiring. So both your dealers and your contractors lose out!

That's why Kennecott is running full-page ads like the one shown below in the Saturday Evening Post and This Week magazines. These national ads are telling millions of homeowners how to recognize Skimpy Wiring in their homes. They're selling them on the idea of re-wiring. They're helping your dealers, your contractors and *you.* Tie in with Kennecott!

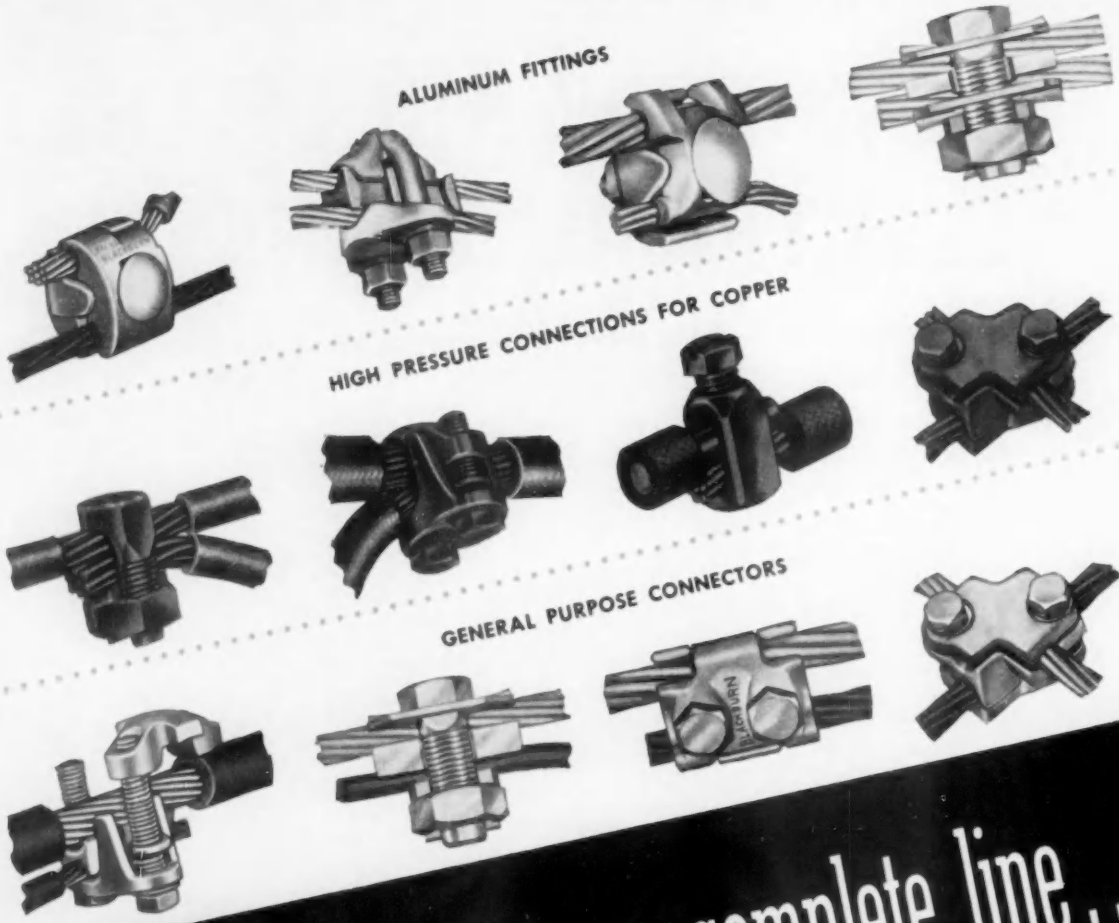
FREE! TIE-IN MATERIAL!

Help your dealers and contractors to fight inadequate wiring in their own areas! Send today for free reprints and poster-sized blow-ups of Kennecott's full-page Saturday Evening Post and This Week magazine ads. Get free copies of the educational booklet, "The ABC of Home Wiring." Ask for complimentary home wiring Wall Chart, contractor mat service folder and list of at-cost prices for large-quantity orders of all material available. No cost or obligation! Write Kennecott Copper Corporation, Dept. WH85, 161 East 42nd St., New York 17, N.Y.

Kennecott Copper Corporation

Fabricating Subsidiaries: CHASE BRASS & COPPER CO. • KENNECOTT WIRE & CABLE CO.

RUSSELL PECK Says...



BLACKBURN —a complete line...

BLACKBURN *Electrical* EQUIPMENT

FAST DEPENDABLE SERVICE FROM OUR CENTRALLY LOCATED FACTORY

JASPER BLACKBURN CORPORATION

"There's no substitute for quality"

and, of course, in the
now that we are in the
will be pleased to do it etc.
but we will eventually make it more
normally.

In the final analysis there is no substitute for quality! During my years in the electrical distributing business our company has been offered many items represented to be "just as good" and often for just a few cents less. However, it's the quality lines like Blackburn's that represent the difference between merely making a sale or making a customer. Of all the lines we handle Blackburn's quality is tops.

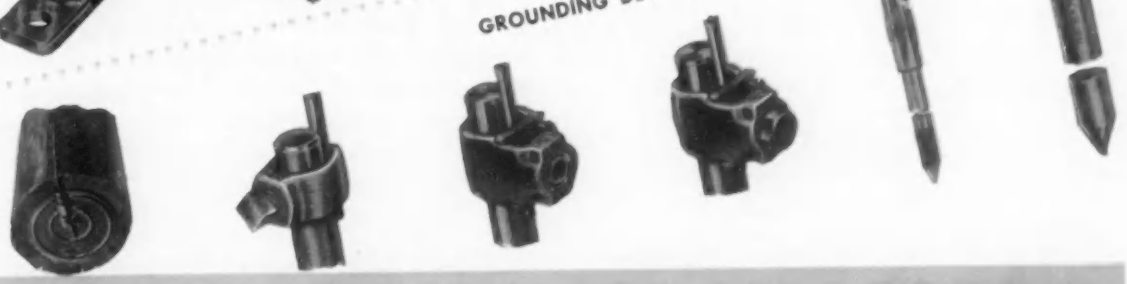
Sincerely
Russell
Russell A. Peck
President

Mr. Russell A. Peck, President, American Electric Company, St. Joseph, Missouri, Wichita, Kansas and Pueblo, Colorado

designed with the distributor in mind

TERMINAL LUGS AND SPLICERS

GROUNDING DEVICES



35 Madison St. · St. Louis 6, Mo. · Phone MAin 1-2821

U. S. Electrical Wire and Cable

AND WE MEAN EVERY MARKET

Industrial production and maintenance men, plant engineers, chief electricians, purchasing agents, all of whom specify, buy or install tremendous quantities of insulated wire and cable . . .

Utility engineers and consulting engineers who pass on specification and design, *and* specify electrical wire and cable . . .

Industrial contractors responsible for the installation of wire and cable . . .

Underground and strip mining operators who buy heavy portable cords and cables . . .

Municipalities and government agencies for police, fire alarm and traffic control cable requirements . . .

Management men in industry, finally, who oversee all operations and are responsible for the ultimate result . . .

In 35 key trade publications we advertise directly to all of these men—we *pre-condition* them to specify and install U. S. Electrical Wires and Cables. Through this advertising, "U. S." has become firmly implanted in their minds and memories. Over 8,650,000 printed advertising messages will reach these men this year—we are spending more money than ever before to bring you greater sales in 1954.

• • •

NOT ONE SINGLE MARKET IN WHICH YOU SELL WILL BE OVERLOOKED

Wherever U. S. Electrical Wires and Cables are sold, that's where you will find them advertised.

Advertising

blankets every market!

MINING

CHEMICALS

UTILITIES

MUNICIPAL

INDUSTRIAL

RAILROADS

UNITED STATES RUBBER COMPANY

ELECTRICAL WIRE & CABLE DEPARTMENT · ROCKEFELLER CENTER, NEW YORK 20, N. Y.

US RUBBER

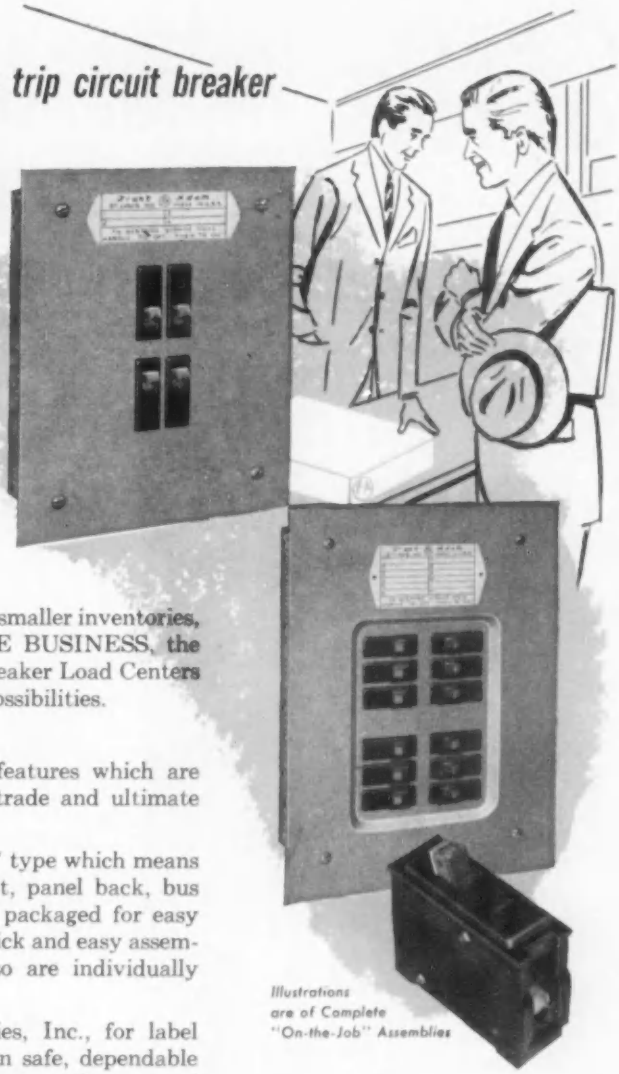
there's more
INDUSTRIAL
BUSINESS
New Business, Repeat Business
in
CHAMPION
Lamps
MAINTENANCE
MANUAL
Industrial lamp buyers are as interested in the cost of *light* as the cost of *lamps*.
Champion is a specialist in industrial *lighting;* equips you with authoritative technical information; backs you with specially qualified district representatives and an active, close-supporting Commercial Engineering Department.
Get on the Champion team and get more sound, worthwhile industrial business. Check with us and we'll give you the whole sales-building story.
Ask us about the many sales helps that are available for your use in building industrial and other new, additional business.
CHAMPION LAMP WORKS
Lynn, Massachusetts
A DIVISION OF CONSOLIDATED ELECTRIC LAMP CO.

T-M thermal-magnetic trip circuit breaker

LOAD CENTERS and SERVICE EQUIPMENT

PANEL BASE ASSEMBLY TYPE

mean smaller inventories . . . faster deliveries . . . increased volume



Illustrations are of Complete "On-the-Job" Assemblies

For alert, aggressive wholesalers interested in smaller inventories, quick turnover, faster deliveries and MORE BUSINESS, the new FA T-M thermal-magnetic trip circuit breaker Load Centers and Service Equipment offer tremendous possibilities.

That's because:

1. The new assemblies embrace many features which are proving extremely popular with the trade and ultimate users.
2. They are of the "panel base assembly" type which means that all components — box and front, panel back, bus bars and main lug connection — are packaged for easy stocking on distributor's shelves for quick and easy assembly on the job. Circuit Breakers also are individually packaged.

Approved by the Underwriters' Laboratories, Inc., for label service, these assemblies are the last word in safe, dependable automatic circuit protection against service interruptions caused by short circuits, and harmless and dangerous overloads.

Features of the new assemblies are FA T-M thermal magnetic trip circuit breakers with quick-make and quick-break operation on manual or automatic trip and FA design magnetic blow-out; screwless assembly (just slip the breakers in), one pressure type connection between circuit breaker and bus bar, and "sequence bussing" to balance the load and permit double pole, individual trip combinations.

If you are interested in adding to your business volume and profit, then order a supply of these assemblies today and recommend them to your customers. For additional information contact your nearest FA representative, listed in Sweet's.

FA T-M Load Centers and Service Equipment are available in four basic combinations to afford a maximum of 4, 8, 12 and 20 poles (all single pole or combinations of single and double pole).

Circuit Breaker capacities are: 10, 15, 20 and 30 amps, 120 volts AC single pole or 120/208 volts, AC double pole, individual trip; 40 and 50 amp, capacity furnished with FA QP Quick-lag P Circuit Breaker. Main lugs for 100 amp, maximum 115/230 volts 3-wire single phase or 120/208 volts 4-wire three phase mains.

Frank Adam Electric Co.

Phone JEfferson 3-6550

BOX 357, MAIN P. O. • ST. LOUIS 3, MO.

makers of:
busduct • panelboards • switchboards
service equipment • safety switches
load centers • Quikheter

there's more
INDUSTRIAL
BUSINESS
New Business, Repeat Business
in
CHAMPION
Lamps
MAINTENANCE
MANUAL
Industrial lamp buyers are as interested in the cost of *light* as the cost of *lamps*.
Champion is a specialist in industrial *lighting;* equips you with authoritative technical information; backs you with specially qualified district representatives and an active, close-supporting Commercial Engineering Department.
Get on the Champion team and get more sound, worthwhile industrial business. Check with us and we'll give you the whole sales-building story.
Ask us about the many sales helps that are available for your use in building industrial and other new, additional business.
CHAMPION LAMP WORKS
Lynn, Massachusetts
A DIVISION OF CONSOLIDATED ELECTRIC LAMP CO.

T-M thermal-magnetic trip circuit breaker

LOAD CENTERS and SERVICE EQUIPMENT

PANEL BASE ASSEMBLY TYPE

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That's because:

1. The new assemblies embrace many features which are proving extremely popular with the trade and ultimate users.
2. They are of the "panel base assembly" type which means that all components — box and front, panel back, bus bars and main lug connection — are packaged for easy stocking on distributor's shelves for quick and easy assembly on the job. Circuit Breakers also are individually packaged.

Approved by the Underwriters' Laboratories, Inc., for label service, these assemblies are the last word in safe, dependable automatic circuit protection against service interruptions caused by short circuits, and harmless and dangerous overloads.

Features of the new assemblies are FA T-M thermal magnetic trip circuit breakers with quick-make and quick-break operation on manual or automatic trip and FA design magnetic blow-out; screwless assembly (just slip the breakers in), one pressure type connection between circuit breaker and bus bar, and "sequence bussing" to balance the load and permit double pole, individual trip combinations.

If you are interested in adding to your business volume and profit, then order a supply of these assemblies today and recommend them to your customers. For additional information contact your nearest FA representative, listed in Sweet's.

FA T-M Load Centers and Service Equipment are available in four basic combinations to afford a maximum of 4, 8, 12 and 20 poles (all single pole or combinations of single and double pole).

Circuit Breaker capacities are: 10, 15, 20 and 30 amps, 120 volts AC single pole or 120/208 volts, AC double pole, individual trip; 40 and 50 amp, capacity furnished with FA QP Quick-lag P Circuit Breaker. Main lugs for 100 amp, maximum 115/230 volts 3-wire single phase or 120/208 volts 4-wire three phase mains.

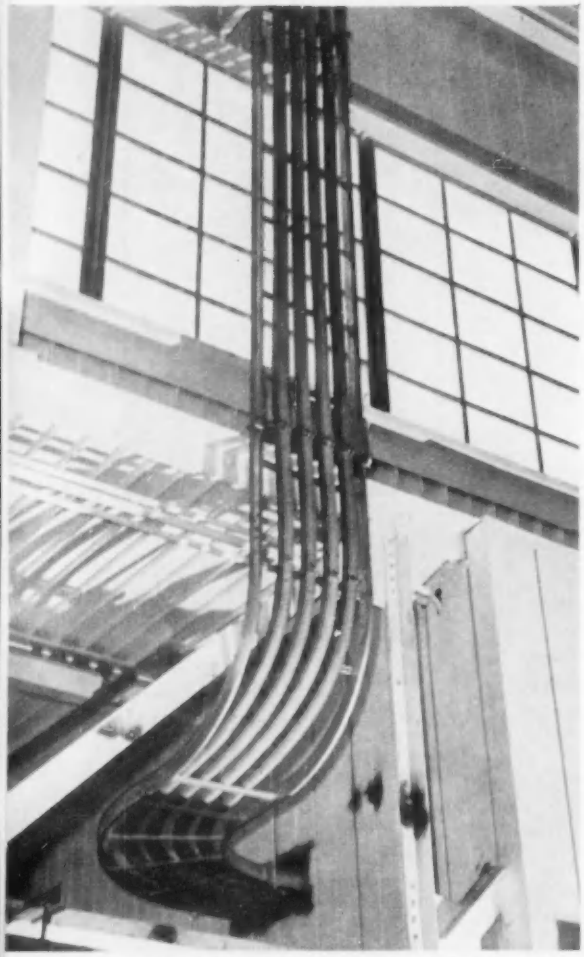
Frank Adam Electric Co.

Phone JEfferson 3-6550

BOX 357, MAIN P. O. • ST. LOUIS 3, MO.

makers of:
busduct • panelboards • switchboards
service equipment • safety switches
load centers • Quikheter

7 ways new developments in wires wiring "modernization" business



Assembly plant reaped high-cost savings by installing flexible, quickly placed Anaconda **Interlocked-Armor Cable** from unit substation.

Plant wiring can be adequate in number and still be costly—because it is obsolete. This is a second phase of "adequate wiring" that is becoming of more and more concern to profit-squeezed management – and a new source of business for wholesalers—every day.

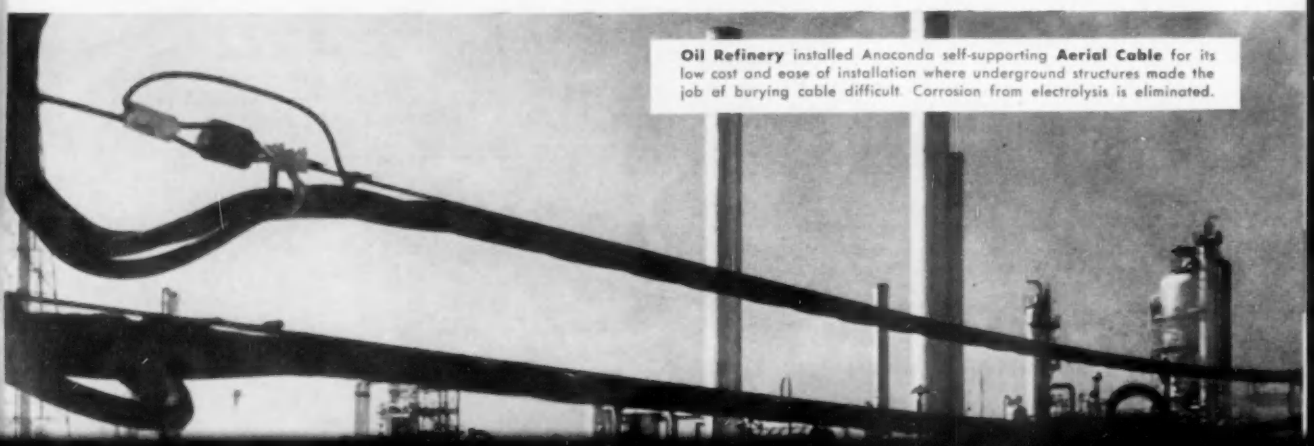
Since most plants were built—including some only a few years old—vast advancements in wires and power cables have taken place.

Let's take a look at 7 of the most important of these in light of changes that have taken place in the plants themselves, in most cases, since the original wiring was installed.

1. NEW HIGHER VOLTAGES. The trend to higher plant voltages—with its resulting savings in cable costs and line losses—poses a new problem: ozone, a by-product of high voltage, destroys ordinary insulation . . . and causes premature cable failure. Anaconda engineers have solved this problem with pioneering work in new *butyl* rubber. Today, Anaconda AB butyl-insulated high-voltage cables have *inherent* resistance to ozone.

2. NEW CABLE HAZARDS. Chemicals, moisture, oil—natural to most modern plants—are tough on cable. Engineers at Anaconda have come up with an answer: Durasheath* rubber-insulated, neoprene-jacketed cable for all voltages. This rugged cable resists almost *every* enemy of cable life. Suggest its use everywhere—aerially, in ducts, or buried directly in the ground. It reduces down-time, maintenance and replacement costs.

3. NEW OPERATING CONDITIONS put a new demand upon wiring. Higher loads generate higher heat in cable . . .



Oil Refinery installed Anaconda self-supporting **Aerial Cable** for its low cost and ease of installation where underground structures made the job of burying cable difficult. Corrosion from electrolysis is eliminated.

and cables build for distributors

and more heat in cable installed underground or in other moist locations is tough on cable insulation. Today, AHW rubber insulation, used on many Anaconda rubber power cables, does the best job ever in withstanding *heat and moisture together.*

4. NEW EQUIPMENT. The addition of process-heating equipment, process or comfort air conditioning, or new production machines calls for more wiring to carry the load. Anaconda Interlocked-Armor Cable can be installed up to 40% quicker than many other types of cable because it needs no conduit. Plant saves time and money when the cable is installed—and later, too, if cable must be moved.

5. MODERN BUSWAY SYSTEMS. Today you can *increase* the flexibility of busways—with Anaconda's flexible Powerduct* Cable. It just plugs into the busduct . . . and unplugs when management wants to move machines. There's no costly conduit to put up or rip out. And the cable is 100% salvageable on every move!

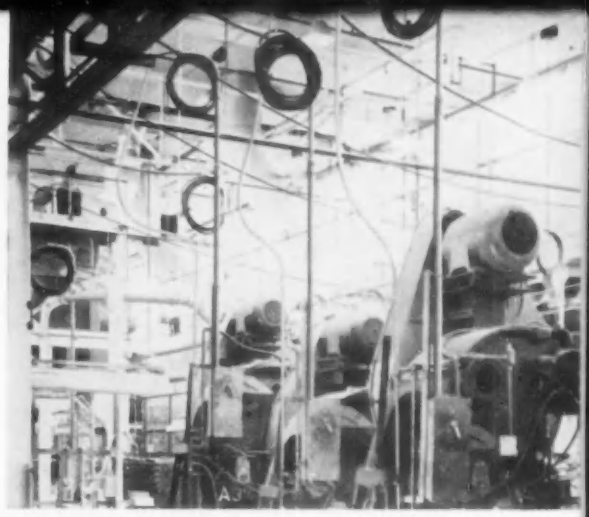
6. NEW POWER. When additional power is needed, Anaconda Aerial Cable is today's popular choice for the job, especially where the ground is packed with pipes and other structures or contains corrosive agents. It is fast, easy to install even between closely spaced buildings where clearance is limited. It's neat, safe, lower in cost than underground systems, and gives highest *reliability.*

7. NEW ELECTRIC EQUIPMENT. The trend to automation and more complex machines puts new emphasis on control cable. The job cannot be left up to cable whose performance is just "so-so." Anaconda's years of cable experience have paid off in a new full line of control cables—with modern types of insulations and coverings to give them highest reliability.

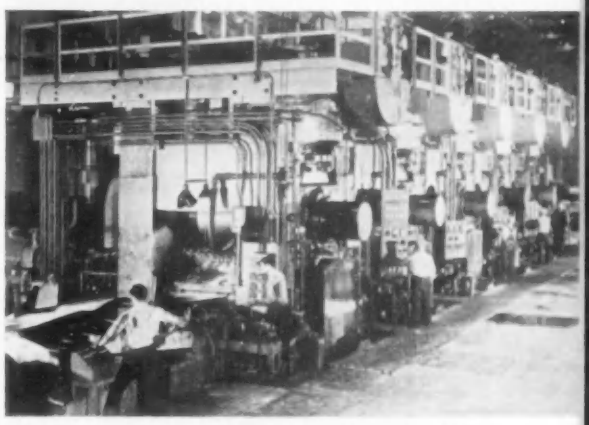
This advertisement provides only a few examples of how modern Anaconda wires and cables can help you help industry in your area wire up for more economical, more efficient production. For more information, see the Man from Anaconda. Anaconda Wire & Cable Co., 25 Broadway, New York 4, N. Y.

*Reg. U. S. Pat. Off.

ANACONDA®



Metalworking plant eliminates expensive rewiring when equipment must be moved—by using flexible Anaconda **Powerduct Cable** from busduct to machine.



Steel Mill uses thousands of feet of Anaconda **Control Cable.** Modern insulations and jackets give most reliable service everywhere there's heat and moisture.

Chemical plant installed thousands of feet of Anaconda **Durasheath Cable** for power and lighting. Rugged neoprene jacket resists heat, moisture, acids and alkalies.

easier to use . . . just tighten the screws

. . . no threads to cut
. . . no fittings to fumble

NEW WEAVER SERVICE ENTRANCE HEADS

all-purpose dual-grip connection

Pats. Pend.

USING EMT?

SAVE MONEY—The connector clamp is built-in! You save the dollars you'd ordinarily spend on special fittings to adapt conventional heads for EMT.

USING RIGID CONDUIT?

SAVE TIME AND LABOR—Just set the head on the conduit and turn the screws. Your men don't waste time and labor cutting threads before installing the head.

No need to bend the conduit out from the wall to allow room for screwing the head on. The handy clamp permits installation flush with the wall . . . vertically or horizontally.

Lightweight aluminum alloy—seals tightly—moistureproof—rustproof. Six sizes: ½", ¾", 1", 1¼", 1½", 2".

Mr. Wholesaler:
Stock up on these new heads now—be set for sales. Write for details today.

UL

J. A. WEAVER Company

2110 HOWARD ST., ST. LOUIS 6, MO.

telephone CEntral 1-0881

A Big Leaguer Now

Electric space heating is no longer warming up in the bullpen; it has moved out to the mound and is starting to throw strikes. And not just in the Pacific Northwest and Tennessee Valley leagues either. Electric heat has stepped into the big league—the national market.

And why not—with proper design and careful application of equipment and controls—electric heat is economical, clean, reliable, safe and efficient. The operating cost advantage of conventional fuels is being steadily narrowed as the development of better electric heating equipment goes hand in hand with improvements in methods of insulating buildings.

Today electric heating dollar volume at the manufacturing level is estimated at $12 million a year—and it's growing fast. Besides the new home market there's the old home market where most electric heating sales (one manufacturer says 85 per cent) presently are being made. It is estimated that only 50 per cent of the homes in this country have a central heating plant. Of the 50 per cent that don't, 92 per cent have a cold spot where electric supplemental heating would be effective. Add to this total the millions of homes that will be remodeled and the millions of rooms that will be added to existing homes this year—and every year—and the market potential becomes slightly staggering. Let's not forget either that motels, apartment houses, offices, stores, schools and industrial plants are important prospects for electric space heating.

What should you be doing about this? Here's what a speaker at the recent NAED convention suggested, "Give your electrical contractors a break—carry a couple of non-competitive lines of electric heating; promote it, talk it up. Don't go around saying it's too expensive; have your man figure the job and state the cost of operation based upon engineering figures, not your opinion . . ."

That's what Inland Electric Co. is doing—and more. And the results have been spectacular. A 50 per cent increase in over-all sales during some months in the year. The sale of high profit goods—18 per cent minimum to 27 per cent quantity discount for the distributor. More than a 100 per cent increase in the value of service entrance and distribution supplies sold for each new home or commercial building. Those are a few of the benefits that selling electric heat is bringing to this apparatus and supplies distributing firm (a nine-page word-and-picture analysis of Inland Electric's success starts on page 51).

There's another big reason why electric heating rates your attention today. As a second speaker at the NAED convention put it, "The electric heating market *belongs* to you and your trade." But this thinking on the part of manufacturers could change if electrical distributors don't do right by electric heating. The business could go by default to some other types of distributors. And in a few years that could be an awful lot of business.

George Jannsmuller

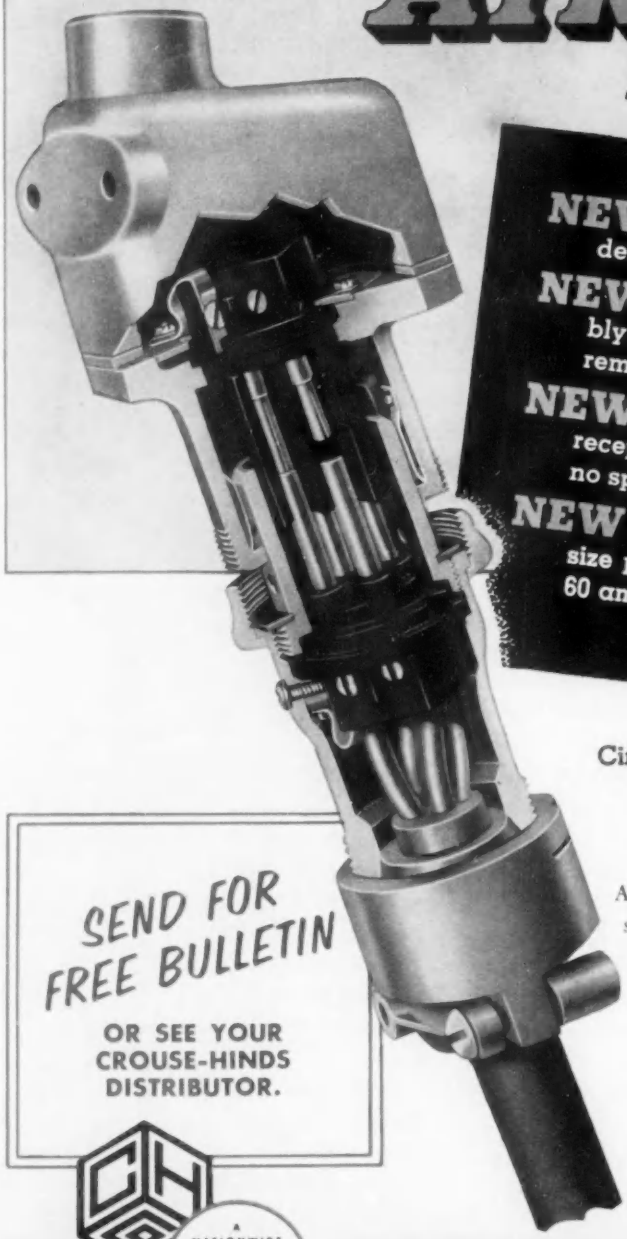
EDITOR

Announcing New, 30 and 60 Amp.

Arktite

HEAVY DUTY

PLUGS & RECEPTACLES



NEW pressure connectors; no soldering unless you prefer to do it.

NEW easier-to-wire interior assembly; comes out in one piece—just remove 2 screws.

NEW easier-to-interchange plug and receptacle interiors; no machining; no special tools.

NEW plug adaptability; takes any size portable cable up to full 30 or 60 amp. capacity.

Circuit-Breaking Features Make Arktite Safe at Full Load Without Disconnect Switches

Each contact is insulated in a separate chamber. Arcs formed while making or breaking circuit are snuffed out in arcing chambers by pressure-deionization and lack of oxygen. No chance of flash-over even if break is made at full load. With grounding contacts longer than load contacts, plug and tool are grounded *before* circuit is made and *after* it is broken.

New *Arktites* now available in 30 and 60 amp. sizes – 2-pole, 3-pole and 4-pole styles. Fully interchangeable with old *Arktites* – *same economical price.*

SEND FOR FREE BULLETIN

OR SEE YOUR CROUSE-HINDS DISTRIBUTOR.

A NATIONWIDE DISTRIBUTION exclusively through ELECTRICAL DISTRIBUTORS

CROUSE-HINDS COMPANY

SYRACUSE, N. Y.

CONDULETS • FLOODLIGHTS • TRAFFIC SIGNALS • AIRPORT LIGHTING

What's Happening in Washington

Washington, D. C.
August 2, 1955

● **Housing Credit Tightening Is Flexible**—Only the extreme fringe of easy credit is being hurt by the new government rules on down payments and the length of mortgages. The market to sell in the housing field for the rest of this year is big: more than 1.2 million new homes this year. So even the two per cent higher requirement for down payments, and the limiting of 30 year mortgages from 30 to 25 years will discourage no more than 100,000 buyers. Tell your customers that the increase in down payments will be just about $200.

The tightening of mortgages is part of a carefully co-ordinated policy which began last November. Then, the Federal Reserve Board allowed general tightening of money to occur, with its effect on housing, inventory buying, and so forth.

In housing, the first direct step was shifting the closing cost onto borrowers under Veterans' Administration loans.

Next, consumer credit came under government scrutiny. Banks are having to give some more facts on consumer credit for appliances, home repairs, and so forth. A gentle hint—a warning. Bank examiners would be looking more closely at loans to see whether they were sound or unsound.

Then this month the nation's banks began to react to warnings from the government to continue to be shrewd on loans to consumers; nothing drastic, but tending to take the rosy hue out of the lender's vision.

Bear in mind: the government's policies are delicate; the president's advisers still see a big market for your goods.

● **Copper Goods May Get Scarce**—An already short supply of copper for wiring, plumbing equipment, gutters, will get shorter before it eases. Indeed, some government officials are talking of instituting civilian priority controls—the first since the Korean fighting.

The strike of smelter works has reduced anticipated supplies by about twelve to fifteen thousand tons weekly. This is about quota to the U.S. stockpile, which already has had to be deferred to meet civilian demand.

Tighter controls on exports have already been installed, and more may come. But no more relief than that drop in the bucket for fabricators is in sight, for several months to come.

● **Urban Renewal Will Be A Big Market**—Some 293 projects for refurbishing blighted areas in U.S. cities have been approved by the government. They will cost, in the aggregate, some $425 million. And an additional $500 million for further projects is contained in the new housing law.

Site clearance has been made on 99 projects. Housing chief Albert Cole has certified a 10-acre area in Philadelphia for redevelopment of homes by private builders. And 57 other cities have qualified for federal aid on urban renewal projects.

In Philadelphia, the Madway Engineering Co., and Bernard Weinberg have

offered to lease cleared sites from the city, and build four 18-story apartment houses. Cost: $15 million.

- **Aluminum Shortage May Be Working Out**—The plight of makers of aluminum products may be eased soon. Now production is coming in from Anaconda, so the flow of industrial goods should follow. And the government is being assured that the big producers, Alcoa, Reynolds and Kaiser, will continue expansion. Some new government incentives can help matters, too.

  There is a price to pay, though. Alcoa's new schedule is in effect, increasing the price of one cent a pound on its pig. This price will soon work through to higher prices on fabricated products.

- **Getting A Piece of Major Construction Projects**—Another proposal that would require prime contractors to list their suppliers on government projects is being delayed until next year. That is the so-called "bid shopping" law. The Senate has approved the measure, which subcontractors and smaller suppliers want. Prime contractors don't like the requirement, but the House is likely to take it up next session.

- **Tax Outlook For 1956**—The best thinking in Washington about what to expect next year in tax relief is this: both the Democrats and the Republicans will recommend legislation to reduce taxes. Their viewpoint will differ, of course, and each will to some degree have their eyes on the voters. But the big differences are:

  Eisenhower will try to match tax reduction to that amount he can afford and still keep the budget in a near balance. His program will be for some windfall to the voters, but so far as he can he will try to make his tax program of the kind to stimulate business expansion and sales. The excises on appliances and so forth will be kept pretty much intact; but some kind of relief may be recommended on corporations, and on partnerships, and then, maybe, on excises.

  The Democrats will aim primarily at personal taxes. They will try again their straight dollar credit along the lines of the $20-a-person bill that failed this year, and on across-the-board cuts directed principally at lower income groups.

  This much is certain: unless the present peaceful climate is changed, a reduction in taxes will be voted to take effect next year.

- **Safety Measures For Refrigerators**—Congress is delaying until next year any legislation that would require better safety gadgets for unlatching closed refrigerator doors. You recall the public-reaction following news stories of children being caught inside the boxes and not being able to get out. The House of Representatives has been interested in legislation that would require manufacturers to put inside latches on the doors. But industry people have requested that designers be given more time to work out a practical latch before enforcement legislation is voted.

- **Atom Radiation For Sewage Plants**—There is an experiment going on in the Corps of Engineers to put together a treatment plant using radiation to kill bacteria. It's experimental, but something to watch, to see what kind of shelf components might be needed in a workable model. Engineers at Fort Belvoir, Va., have treated sewage with radiation on a test basis. If these tests are favorable, then a pilot plant will be built. The data can be adapted for use in municipal sewage installations.

ABOLITE REFLECTORS give better light...

• Whiter than white titanium inside finish reflects more light. Slotted neck construction on industrial models provides cooler light and consequently longer lamp life. Vitreous fired lifetime porcelain enamel won't stain or discolor . . . is easier to clean. All-White models (inside & outside) provide modern, attractive appearance. Sell the ABOLITE line for maximum customer satisfaction for every lighting requirement.

WRITE FOR CATALOG.

STANDARD DOME

best possible unit for general lighting requirements.

SHALLOW DOME

for widespread illumination in factories, garages, etc.

DEEP BOWL

for general industrial lighting: work benches, assembly lines.

ALUMINUM MEDIUM & HIGH BAY LIGHTING

anodic treated surface provides highly efficient light reflection and slotted neck construction gives cooler light for longer lamp life.

PORCELAIN ENAMEL HIGH MOUNTING

for concentrated light in high bay areas.

PROTECTO SHIELD

protects R 52, R 57 type lamps against breakage. (For R 40 Lamps, RF series, Deep Bowl reflectors can be utilized).

FLOODLIGHTS

mercury vapor and incandescent for every outdoor application.

OUTLET BOX REFLECTORS

reflector top serves as outlet box cover and connector.

ABOLITE Lighting DIVISION

THE **JONES** METAL PRODUCTS CO.
West Lafayette, Ohio

CARGOLITES

swivel type, for docks, piers, freight loading platforms.

MERCURY VAPOR

high and low bay, for high efficiency industrial lighting.

BIN LIGHTS

meet the need for better light in aisles, corridors, vertical storage racks and bins, and similar hard-to-light locations.

YARDLITES

complete with all fittings for safe, economical outdoor lighting.

RAYOLITES

adaptable to a wide range of uses in exterior and interior floodlighting.

GLASS STEEL DIFFUSERS

for soft illumination of schoolrooms, offices, showrooms, gymnasiums.

YOUNGSTOWN BUCKEYE CONDUIT

HOT GALVANIZED: High quality steel pipe is first thoroughly cleaned by pickling in acid, then immersed in a bath of molten pure zinc. After threading, a coating of tough, transparent enamel is baked on —providing double corrosion protection of zinc and enamel —inside and out.

ELECTRO GALVANIZED: After being threaded, reamed and carefully inspected, this conduit is cleaned by pickling, then uniformly coated outside with zinc. A coat of tough, elastic black enamel is then baked on the interior, providing protection as well as a smooth raceway for trouble-free wire pulling.

BLACK ENAMELED: A protection, black enamel coating is applied inside and out by dipping. When a uniform thickness of this coating has been achieved, it is then baked to form a tight, elastic, high lustre finish—guarding against cracking in bending or forming operations during installation.

ELECTRICAL METALLIC TUBING: Absolute uniformity of weight, wall thickness and concentricity, plus protective outside coating of pure zinc and baked-on elastic enamel interior, forms this modern mirror-smooth raceway. Lightweight, easy to handle, no threads to cut, bends readily and assures safe, economical, life-time electrical installations.

Proven – THROUGH THE YEARS

Yes, Youngstown Buckeye Conduit has been proven through the years by thousands of owners and by leading Electrical Contractors the world over . . . proven that it is easy to bend . . . easy to fish wires through . . . and economical due to greater corrosion resistance that means longer, trouble-free life in actual service. Youngstown Buckeye Conduit has also proven that it pays dividends through lower installation costs and greater efficiency. Add to these many features the fact that Youngstown Buckeye Conduit is manufactured "from iron ore to the finished product" by ONE integrated steel company and you know why it is prefered by so many.

CONDUIT

Size	Nominal Diameter (Inches) Internal	Nominal Diameter (Inches) External	Nominal Wall Thickness (Inches)	Threads Per Inch	Feet Per Bundle
1/2	.622	.840	.109	14	100
3/4	.824	1.050	.113	14	50
1	1.049	1.315	.133	11 1/2	50
1 1/4	1.380	1.660	.140	11 1/2	30
1 1/2	1.610	1.900	.145	11 1/2	30
2	2.067	2.375	.154	11 1/2	
2 1/2	2.469	2.875	.203	8	
3	3.068	3.500	.216	8	
3 1/2	3.548	4.000	.226	8	
4	4.026	4.500	.237	8	
5	5.047	5.563	.258	8	
6	6.065	6.625	.280	8	

Conduit furnished in 10-foot lengths, threaded both ends with one coupling.

COUPLINGS

Size	Outside Diameter (Inches)	Length (Inches)	Pieces Per Carton
1/2	1.063	1.562	100
3/4	1.313	1.625	50
1	1.576	2.000	50
1 1/4	1.900	2.062	50
1 1/2	2.200	2.062	50
2	2.750	2.125	25
2 1/2	3.250	3.125	
3	4.000	3.250	
3 1/2	4.625	3.375	
4	5.000	3.500	
5	6.296	3.750	
6	7.390	4.000	

ELBOWS

Size	Radius (Inches)	Offset (Inches)	Pieces Per Carton
1/2	4.000	6.500	50
3/4	4.500	7.250	50
1	5.750	8.750	25
1 1/4	7.250	10.500	20
1 1/2	8.250	11.750	15
2	9.500	13.500	10
2 1/2	10.500	15.000	
3	13.000	18.000	
3 1/2	15.000	20.500	
4	16.000	22.000	
5	24.000	31.000	
6	30.000	37.500	

ELECTRICAL METALLIC TUBING

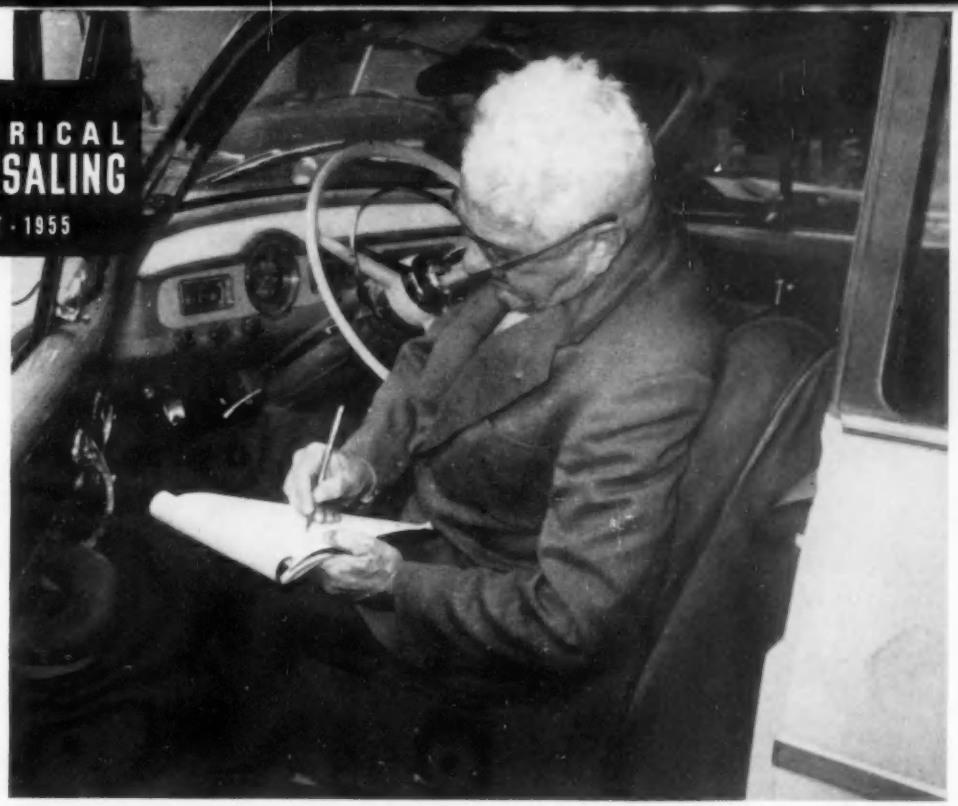
Size	Nominal Diameter (Inches) Internal	Nominal Diameter (Inches) External	Nominal Wall Thickness (Inches)	Feet Per Bundle
1/2	.622	.706	.042	100
3/4	.824	.922	.049	100
1	1.049	1.163	.057	100
1 1/4	1.380	1.510	.065	50
1 1/2	1.610	1.740	.065	50
2	2.067	2.197	.065	30

EMT furnished in 10-foot lengths, without couplings.

THE YOUNGSTOWN SHEET AND TUBE COMPANY
GENERAL OFFICES • YOUNGSTOWN 1, OHIO • U. S. A.

BUCKEYE YOUNGSTOWN CONDUIT

ELECTRICAL
WHOLESALING
AUGUST · 1955



Salesman Joe Ball notes a wedding date—one of the "little things" that paid off when he started . . .

Breaking In A New Territory

His customers were scattered far and wide; the territory was a big one. His competition had more than twenty years' head start. But success in selling service—and sticking to it—paid off for South Bay Electric's Joe Ball.

By Thomas M. Cassidy

IT'S been two years since South Bay Electrical Supply Co.'s Joe Ball put on his "hat and went looking for business." In that time Joe's station wagon has pulled out of Patchogue two and three times a week and on to more than 60,000 miles of eastern Long Island's concrete highways and dirt byways. His sales now average over $70,000 per year and are increasing.

As Joe puts it: "I had no house accounts and was low man on the totem pole. So I just kept calling, took any order and was happy to get it, even if it was only for a half dozen fluorescent starters worth sixteen cents."

Joe's far flung customers number mostly contractors with some industrial accounts. How his salesmanship has paid off can't be rightly measured. But partner Al Baron points out that South Bay's volume in 1954 increased 60 per cent over 1953. And no small part of that increase, Baron says, has to be chalked up to "Uncle Joe."

It was hard at first—still is—because Joe Ball is selling against independent and chain competition from Suffolk and Nassau counties as well as New York City—one tough competitive area, pricewise. His more than eight years with another supply house served as a good background for breaking in the new territory.

Continued on the following page

Around the Speedometer

7 A.M., STILL DARK: Joe has packed orders and begins to load them. He uses a station wagon for all but the heaviest material; then, he uses the firm's pickup truck. The station wagon has 6-ply tires to help ease the load on the springs.

4 MILES: Day hasn't warmed up yet. At Brookhaven Memorial Hospital Joe talks, sells contractor on additional fittings. Then on to Brookhaven Atomic Labs at old Camp Yaphank to drop off a fan. AEC security checks slowed him down.

• **An Insurance Policy**—Joe Ball started out his business life selling fire insurance. This, he says, was fortunate, though of course he didn't know it at the time. And why? "All the rates were the same. That was the law. So we were forced to sell service." And service is what South Bay and Joe Ball sell.

Several years ago "price and nothing but" confronted Al Baron and Sam Stahlman, partners in the firm. They countered with service, reasoning that, if South Bay were permitted to make a fair profit, the customers, real and potential, would also benefit. For a contractor would save money if his men didn't have to wait around an hour or more for delayed material. And those contractors who were doing three jobs a week, could do four and make a profit—with good service from their distributor.

How did Joe Ball, in a big, new and unfamiliar territory get started? He says he put on his "hat and went looking." How does he do this? Let's see, for selling and service consist of a lot of little things.

• **What's In It**—Joe Ball packs and delivers his own orders. Not just special orders but all his orders. The requirements of his far-flung territory—and the fact that he wants to get on the closest basis with his new customers—makes this necessary. He drives his station wagon most of the time so he can use the fast parkways and park in certain restricted traffic zones. On heavy jobs, such as delivering a generator, Joe, and counterman Charlie Hedges, will go out to the customer together. Then he drives a pickup truck.

He knows whether or not an order is complete before he starts out. If there is a shortage, he tries to make it up.

"I have borrowed from Peter to pay Paul. I know which contractor has something extra, oh for example, a coil of Romex. On my trip I stop off and pick up what the other fellow needs and bring it back to where he's working. I return the stuff on my next trip."

Joe arrives around 7 a.m. and opens up the store. Monday is flexible; he works inside and makes short calls. Tuesday and Thursday he highballs it out to East Hampton and beyond. (About 37 miles, one way, as the crow flies, but "I'm no crow.") His calls are to the North and South Shores and in between.

Wednesday he calls in and around Patchogue. Friday is open for emergency or special calls. Saturday and Sunday Joe is usually off. But his customers have Joe's home telephone number and he has made more than a few hurry-up calls on the weekends, as have the other South Bay salesmen. As for holidays . . . "Whew, do they set me back," he exclaims.

• **Calling, Asking**—To put the most into the promise of service involves more than being available when a customer might call for something. Joe Ball believes it also includes trying to anticipate a customer's needs whenever and wherever possible. A contractor once telephoned Joe and asked for an 8-inch fan. When confirming the order, he gave a catalog number covering a 6-inch fan. Joe knew the job, knew the contractor was in a hurry, so to make sure, he brought along one of each size and wound up selling both.

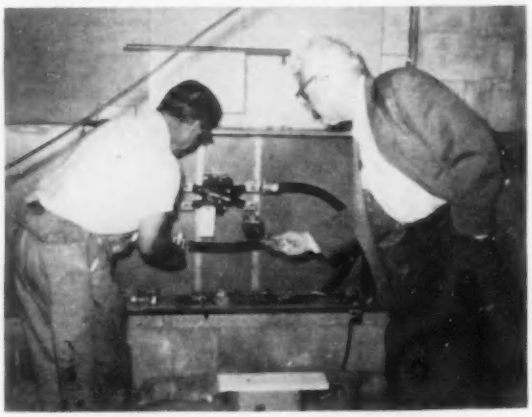
When he started, the first six months were like doing business in a vacuum. Just bread and butter items. Several of his competitors had more than 20 years' head start. But in that time Joe established his method for selling. It is: "Even if I'm tired, I'll come at 11 p.m., if necessary, but only if you say so."

Last spring he persuaded a contractor to place a couple of portable yardlights in his show window. The contractor, by no means keen on the lights, was told he could keep them until September, "practically on consignment." If they didn't sell, Joe would take them back. At first—nothing, but when the hot weather approached the lights sold fast and Joe got an order for a dozen more.

• **Little Things**—In an emergency Joe starts out earlier than usual, barreling directly toward East Hampton and working his way back. However, he tries to time his arrival at a certain place, say Southampton, around lunchtime. Then he calls on those contrac-

Continued on page 88

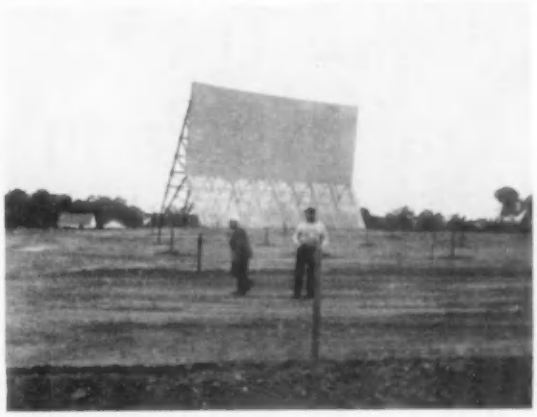
With Salesman Joe Ball



22 MILES: The sun was getting warmer when Ball was shown by a contractor how he used a cable tap connector in a transformer cabinet at new Wading River trailer camp. Before leaving, Joe checked order of 6,000 ft. of conduit outside.

37 MILES: If South Bay is short, Joe'll try to make it up. At R & M Electric Supply Co. in Riverhead, he picked up a 24-circuit panelboard from his friend, owner Mike Velys. Also asked where he could get two coach lanterns. Velys had them.

49 MILES: In Southampton he dropped off switch at contractor's house. The contractor had finished lunch so Joe went looking for him. He sold a germicidal lamp and promised to bring a special connector on next trip—day after tomorrow.



57 MILES: At site of a drive-in movie in Bridgehampton, Joe steps off length of direct burial cable between speaker posts. Electrician told him of another being planned. As Joe left he called, "I'll have some bugnuts, Joe, give you a growl later."

65 MILES: After several in between stops, Joe arrived at The Springs, farthest stop for the day. He was late; the contractor out, his wife didn't know exactly where. Joe delivered order, went driving around to several places but couldn't find him.

140 MILES: Back in South Bay Joe checks with counterman Charlie Hedges on a customer's order. Joe promised he'd deliver the material before 10 a.m. next day. Then home to supper—but first he dropped off two coach lanterns.

Promotion piece tells customers the story on Doubleday-Hill's new drive-through facility

How They Broke Their Traffic Strangle

By George D. Farley

ASK anyone at Doubleday-Hill Electric Co. about their traffic problem and you're likely to get a quizzical look and an answering query: "What traffic problem?"

Unusual for an electrical wholesaling firm not to be plagued by the problem these days? Yes—but just one year ago it was this Pittsburgh firm's biggest headache. Like so many other electrical supply businesses, Doubleday-Hill was forced to make a decision then. It could stay where it was in the heart of the traffic-constricted Golden Triangle, or move away from this ancient business center as so many of its competitors had.

But it wasn't so simple a choice. Executive vice president George W. Provost puts it this way: "We thought about moving out of town to escape our worsening problem. We even scouted and priced potential sites on the outskirts—made detailed cost surveys on each location. We found that a new building on land outside the Triangle would run to at least $500,000.

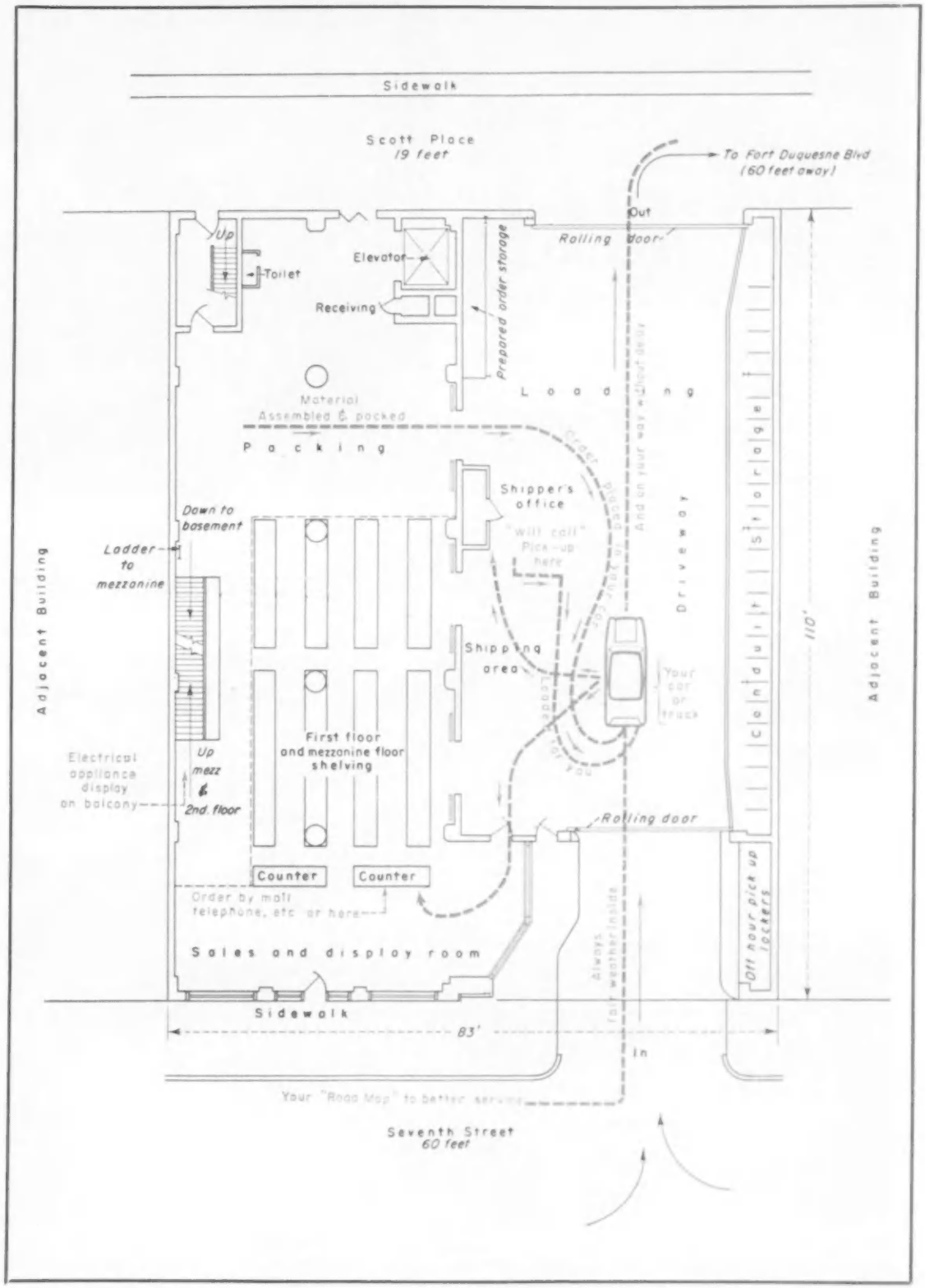
• **Lose Business?**—"Then, too," he continues, "we've always done a substantial volume of business with customers in our immediate downtown district. We had been identified with the Triangle since 1884. The national purchasing offices of 15 of the largest buyers of electrical equipment in the world were within five minutes walking distance. These and other considerations made moving out more of a gamble than a calculated business risk."

If Doubleday-Hill stayed, the problem could only become worse. A survey showed that the existing loading and unloading dock—facing a 19-ft. wide alley—was almost useless; between 8 A.M. and 5 P.M. the alley was blocked each day for an average of 3½ hours. Something had to be done—and quick!

Adjacent to the building was a 43-ft. by 110-ft. parking lot which the firm purchased for $160,000. Three months later, the one-story, off-street drive-through was completed and serving between 150 and 200 trucks per day. What's more, there was no more parking problem. Vehicles of all sizes rolled in, picked up orders and sped out down Scott Place to Fort Duquesne Boulevard—an express highway spreading to north, east, south and west.

• **Future Bright**—After a year of operation, says Provost, the number of orders received daily is running from 20 to 30 per cent better than the "pre-drive-through" figure and the number is still increasing. He figures the firm saved $350,000 by staying downtown and expects to have the $160,000 outlay back in 10 years—perhaps sooner. "Take receiving alone," he says. "It used to take six men 4½ hours to unload 50,000 lbs. of conduit in the alley and carry it to storage. Now it takes two men one hour—and they're out of the way.

Here's How the 'Drive-Through' Works

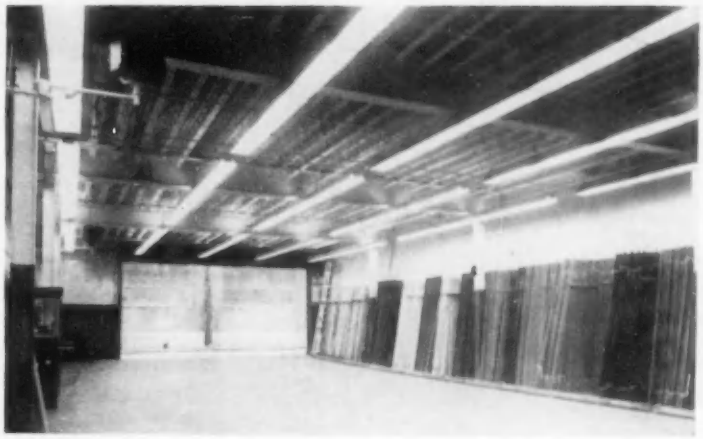


To see this layout in pictures, turn page

DRAMATIC CONTRAST—When construction of Doubleday-Hill's "indoor street" first began (above), supports were sunk 20 feet in the ground so that five or more floors can be added as future business dictates. Night view (right) shows modern facade which joins original building with the new annex, presenting this electrical distributor's new look to Pittsburgh's redevelopment-conscious Golden Triangle. Attractive lighting eliminates "garage" atmosphere, points up company's reputation for selling top commercial and industrial lighting (EW-Sept. '54 p. 74).

What's In Doubleday Hill's Drive-Through

INDOOR STREET is well-lighted, accessible to main operation. It doubles as a loading-unloading facility with room for two trailers, 16 delivery or 24 pickup trucks. Electric driven steam heaters (arrows) beat heat-loss problem when doors are open.



OPPOSITE VIEW of annex shows deep racks for all sizes of conduit. They can be quickly restocked directly from incoming trucks. Fixtures above demonstrate three industrial lighting types—100% down, 10% up and 25% up-light.

WILL CALL AREA has ample space for storage of orders in adjustable metal shelving. Material is tagged for quick identification. Completely enclosed booth has telephone, intercom and control buttons for front and rear sliding doors.

MAXIMUM operating efficiency and plenty of plus features—those were the aims of Doubleday-Hill Electric Co.'s management in the planning phases of its annex for off-street loading and service.

A look inside (see pictures) makes it evident that the firm has attained its goal. Within this 43-ft. by 110-ft. building are the latest equipment and warehousing ideas all designed for one purpose—to sell the firm's customers on the convenient and expeditious service this new facility provides.

Three sliding double doors—each eight feet wide—allow a smooth flow of material directly from the main building warehouse to the shipping department where it is quickly assembled, packed and loaded on waiting customer trucks or tagged and stored in will-call shelves. Besides being functional, the excellent lighting in the indoor street is used to demonstrate types of industrial fixtures to potential buyers. Deep conduit racks—just out of the truck path—minimize handling on loading and unloading.

"Though the addition is spacious, every inch of its 4,370 sq. ft. packs a service wallop," says executive vice president Provost, "because it was planned that way. And that's why we're beating the traffic strangle."

CUSTOMER CONVENIENCE is another plus feature in the drive-through. Contractor phones in order, is assigned locker number and lock combination. Then he picks up order at his convenience in customer's drive-in vestibule.

Brings you up-to-date on what you can sell to . . .

The Laundry-Cleaner Market

- Larger commercial laundries and cleaners are still the best market—although smaller-sized units are increasing in number.
- Industry trend is to faster, cash-and-carry service. This puts emphasis on adequate maintenance stock.
- Buying patterns vary from purchasing agents for larger plants to laundromats where owners buy at local hardware stores.

LAUNDRY and dry cleaning establishments are fair potential markets for the electrical wholesaler's salesman. They use many motors to operate their complex of machines, and high plant temperatures open the door for ventilation sales.

But two minus-factors drop them from the top bracket as commercial markets. One is that specialty machinery comes with electrical components factory-installed by manufacturers. The other is that, except in larger plants, there is seldom a maintenance crew. The result: considerable supplies are purchased through contractors.

Where purchases are made direct from the plant, the purchasing agent or manager should be contacted. Institutional plants purchase equipment on the same basis—except when government-run, where bids are sometimes involved. In smaller units, the electrical contractor is most important—unless the proprietor buys his electrical supplies at the neighborhood hardware store.

• **Measurement**—The core of this established but changing market is in the amount of electric-powered machinery used.

Laundry and cleaning machinery, for all practical purposes, are the same. Basically, there are washers, extractors, and tumblers or spin dryers—plus, in laundries, flatwork equipment such as folders and ironers. And with each machine goes motors, preferably vapor-proof types.

Added to these motor needs are the ventilation, sound systems and lighting required in larger plants. The total points up the best market: the commercial cleaners and laundries.

Institutional laundries are often overlooked but handle, in fact, a volume second only to commercial plants. They buy equipment in similar quantities. Of lesser importance

THE SMALLER UNITS ARE WINNING OUT

In the laundry-dry cleaning industry, a creeping revolution is under way. The big commercial plant—a multi-floor operation with a delivery fleet—is withering; coming into its own is the neighborhood "package" plant, with everything under one roof and with cash-and-carry service. The main reason: consumer demand for faster service.

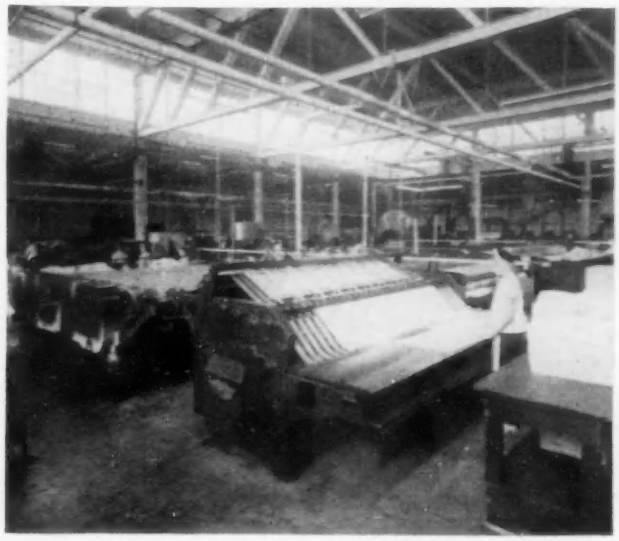
This swing toward smaller units is affecting neighborhood laundromats as well. Turning from customary self-service, many are moving to a partly commercial operation—supplementing nine-pound washers with 25-pound units. They are also doing more and more specialized work, such as shirts.

Three major sections of the 85,000-plant industry, however, are untouched by this retail revolution. One is the institutional end—the many laundries operated by hospitals, hotels, companies and government-run institutions. The others are the local hand laundries and the rug cleaners, both of which are operating by the old rules.

Despite the fact that equipment and processes are similar, cleaners (which usually do dyeing) and laundries are usually separate operations. Equipment, for example, is similar in appearance but frequently different in design. The main exception to the divided operation is the large power laundry with a cleaning department; few cleaners have laundry facilities.

Purchasing patterns vary as much as do industry segments. Larger laundries and cleaners buy through managers or purchasing agents, while small units are wholly run by their proprietors. Institutional laundries buy through managers and, on bigger government purchases, through open bids.

With the trend to smaller plants, this market is harder to reach. But the market is growing—especially for equipment that works faster and more efficiently. Equally strong is the need for providing more worker comfort out back and customer comfort at the counter.



Laundry-Cleaners: Maintenance supplies for a spreading industry

are neighborhood cleaners—and at the bottom are hand laundries, which use a minimum of machinery and provide employees with less-than-standard lighting and ventilation.

Laundromats are an unknown quantity. They are admittedly small in size and large in number. At the same time, with purchases of more commercial type machinery, they are doing a bigger slice of industry buying. Though still not a big market, one laundromat trend is indicative: a growing 10 per cent of owners now run more than one store.

• **Motors** make the industry run. In a power laundry, for example, these motors may be found: 3 to 5 hp (for washers and mangle folders), 5 to 7 hp (for spin drying sheets and flatwork), and ½ hp (for hot air tumbler dryers and fluffing up flatwork). A cleaning plant might use similar equipment and motors, plus fractional hp motors to run large cleaning machines.

Most drying is done with hot air; electric drying has never made an inroad on this market. But motors are used universally to operate compressors supplying air to pneumatic pressing machines. Water pumps are also needed, especially in multi-story operations.

In many plants, a number of them small, materials handlers are used widely. Conveyors, with 3 hp motors, might be used from the receiving department to the washers. Or hoists, with 1 hp motors, from washers to tumblers. In multi-story operations, either conveyors or elevators are required.

A number of replacement motors must be kept on hand to fill in for units out for repair. Many plants utilize motor repair shops; in larger plants, maintenance crews often handle this work, and standard repair and accessory equipment is kept in stock.

• **Ventilation.** The large amount of heat used to dry clothes demands continuous air removal and circulation to keep plant conditions endurable. The minimum is a variety of fans and blowers; it is axiomatic that any plant could use more, for employee comfort and efficiency.

Because of costs and the heavy concentration of water vapor, the industry is unlikely to buy air conditioners for plant use. But the retail atmosphere of the front counter makes the units salable there.

• **Lighting** is under-par in most plants. Seldom is the overhead illumination equal to minimum standards, and close-up work lamps are nearly non-existent. The sales approach on lighting is the same as that for ventilation: employee efficiency.

As with air conditioning, there's a potential for better lighting (and electric signs) up front. No matter what the condition in the plant, retail display rules hold in the counter area.

• **Sound Systems.** Laundry and cleaning plants are filled with people doing routine, automatic jobs. Since the noise level is low, they offer a natural market for music programming systems.

Of equal importance to management may be paging and intercom systems, which can be installed with the music setup. The net result: better coordination of overall plant activities.

These systems mean loudspeakers, baffle enclosures, amplifier assemblies, microphones, record players and AM/FM radio tuners—not to mention special wire and other supplies.

• **Special items** of value to the industry are electric scales, which are more accurate than spring types, and unit heaters, for out-of-the-way sections of a plant.

• **Stock**—Spare motors and accessories are stockpile items, in line with industry dependence on motor-driven equipment.

Other stock items:

- Motor repair tools.
- Lamps, ballasts and starters.
- Wire and thinwall conduit.
- Switches, receptacles and fuses.
- Motor control parts.

NEXT MONTH:

The Meat-Packing Market

In partnership with the industry...

This Better Wiring program—
the culmination of several pilot
projects and years of planning—
takes in all the markets:

- ★ Commercial-Industrials
- ★ Home Modernization
- ★ New Adequate Wiring
- ★ Apartment Houses
- ★ Planned Education

LIAISON: Henry Czech (r.), Wholesaler's Assn. and

Chicago Adds Five New AW

CHAIRMAN of Education committee is Bolan H. Boatner, district manager, Westinghouse Electric Supply Co.

WITH DISTRIBUTORS helping to break interference, Chicago's Electric Association has tackled a broad, cooperative wiring promotion program.

The program takes in all markets for wiring and rewiring—from residences, old and new, to apartment houses and commercial-industrial installations. It draws diversified support from distributors, contractors, manufacturers and the utility.

Called the Five-Star Better Wiring program, it is now midway in its first year. All concerned (*see distributor comments*) admit that it is far from full-grown, but agree that it is already making the lusty sounds of a healthy baby—such as the 5,000th Adequate Wiring certification, soon to be publicized.

• **Five Stars**—This broad program has firm roots. Behind it lies much planning, including two extensive pilot projects, on the best way to beat Chicago's wiring bottleneck. Chicago's AW Bureau has been operating since 1951, and this program is built around it.

1955's five-part, $55,000 BW program shapes up this way:

• **Commercial - Industrial.** This part, with its direct pitch to industrials on expanding electrical usages, is perhaps the most unique.

Six mailings are being made to 6,500 production executives. Emphasis is on engineering ideas, not promotion gimmicks. Following an introductory letter (already mailed), each mailing will stress one specific subject: industrial lighting, electro-thermal processing, new electrical ideas and products, productive maintenance and modern power distribution systems. All returned inquiry cards will be followed up.

Distributors on this committee are

...Distributors are knee-deep in Chicago's wiring promotion

Roger Kellogg, Electric Assn.

SAUL J. WEINRESS
Efengee Electrical Sup. Co., Inc.

"We are trying to get builders on our side. One going project is getting them to add AW costs to mortgages. Perhaps co-op ads on 'safe, adequately wired homes' would be another. . . . But there's one basic difficulty: people don't understand what AW will mean to them. . . ."

R. R. HILL
Hawkins Electric Co.

"Sure it'll take time to get the program rolling. Any contractor will tell you how many calls it takes to close a wiring sale. Part of the answer is in the right approach; our committee (Commercial-Industrial Usages) is going in heavy on a specific, cost-savings pitch. . . ."

'Stars'

R. R. Hill, Hawkins Electric Co.; Fred R. Eiseman, Jr., Revere Electric Supply Co.; and Henry Czech, Chicago Electrical Wholesaler's Association. (Czech, as last year's Electric Association president, was in on BW's birth; he still works closely with the program but the wholesaler's group has no formal connection with it.)

• **Home Modernization.** The basis for this part of the BW program is a 1954 pilot study. Made in three separate mile-square areas, the study measured acceptance of a wiring modernization "package" among owners of one-family dwellings.

Three points were sharply underlined by the study: 1) Much material (for extra wiring, specific outlets, etc.) was sold above the minimum $119 package; 2) homeowners would buy only on the basis of need, not because of slick promotion; and 3) there is,

Continued on page 90

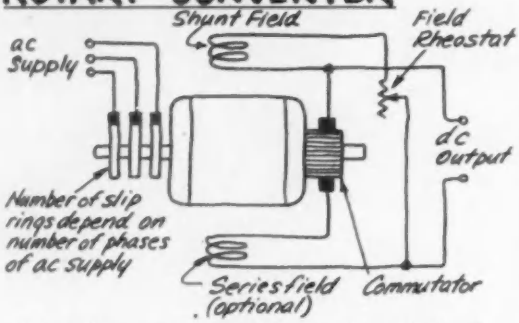
FRED R. EISEMAN, JR.
Revere Electric Supply Co.

"The right time to promote wiring is right now. Business may be loose, but profits are down—and this program means profits now and in leaner years. . . . The big headache here—and probably everywhere else—is pepping up the men at the point-of sale to sell rewiring hard. . . ."

EDWARD F. ANIXTER
Englewood Electrical Sup. Co.

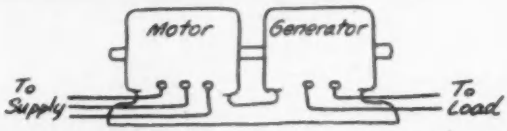
"What we need is more 'scare.' BO and halitosis have been talked to death, but they proved that fright is the fastest way to move the public. Tell them that they'll go blind or their house will burn down—if they don't have the right wiring in the right places. . . ."

ROTARY CONVERTER

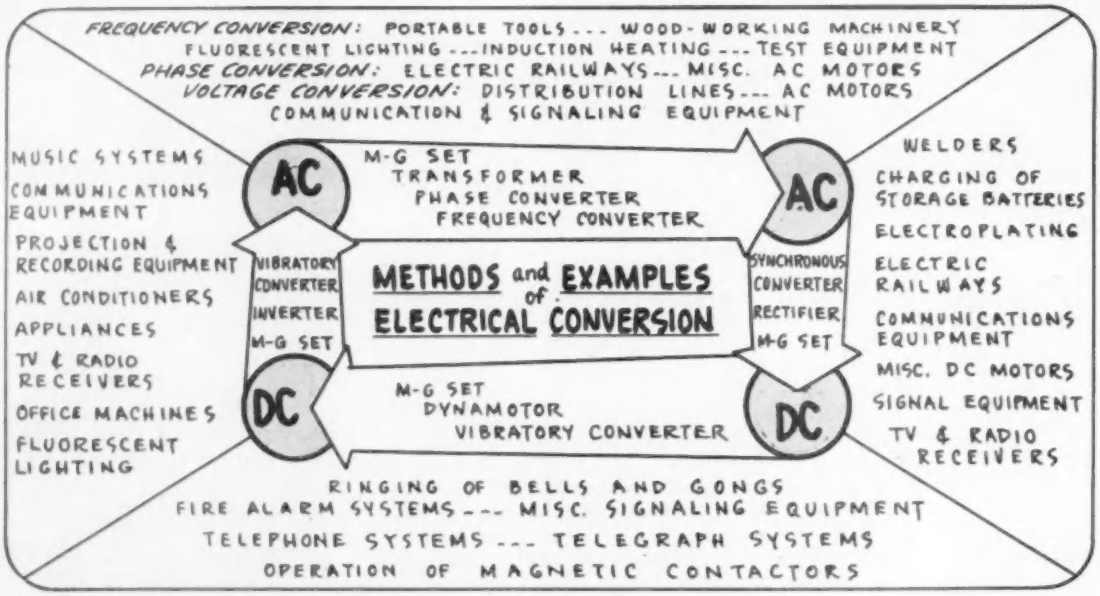


- Normally, ac is supplied to slip rings; dc load is fed from commutator. Machine is then performing as SYNCHRONOUS CONVERTER.
- If dc is fed to the commutator and ac taken off slip rings to feed load, machine is called an INVERTED CONVERTER or INVERTER.

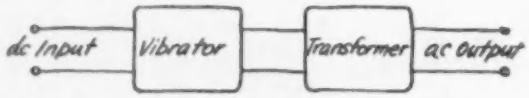
MOTOR-GENERATOR SET



- AC to DC CONVERSION: Motor corresponds with ac supply; generator produces desired dc voltage.
- DC to AC CONVERSION: Motor is dc; generator is ac of desired frequency and voltage.
- FREQUENCY CONVERSION: Both machines are ac. Ratio of number of poles of two machines equals ratio of frequencies.
- PHASE CONVERSION: Both machines are ac. One corresponds with supply frequency; other is rated at load frequency.
- LOW DC to HIGH DC: Both machines are dc; motor corresponds with supply voltage, generator with load voltage.

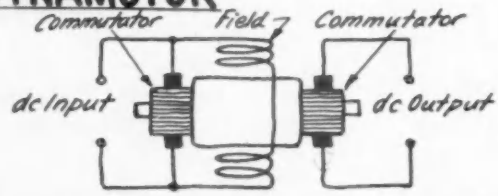


VIBRATORY CONVERTER



- Vibrating armature or tuned reed makes and breaks dc input current, feeding transformer first in one direction, then in the other.
- Transformer is chosen to provide desired ac voltage.

DYNAMOTOR



- Essentially a motor-generator set with both windings on one armature, the dynamotor is used to convert dc at a given supply voltage to dc at another voltage.

Converters

By W. J. Novak and J. F. McPartland

IN ADDITION to rectifiers—which convert alternating-current power to direct-current power—there are other devices which can convert electric power from one form to another form. These devices are commonly labeled "converters." There are motor-generator converters, synchronous converters, frequency converters, phase converters and a wide range of small plug-in unit converters for very low power applications.

M-G Sets

Motor-generator sets are capable of converting large amounts of electric power from ac to dc or from dc to ac. Such sets consist of a motor and a generator arranged end-to-end, with their rotor shafts firmly coupled together. To convert from ac to dc, the motor must be an ac type and the generator must be a dc unit. To convert from dc to ac, the motor must be dc and the generator ac. In both cases, input power is fed to the motor; output power is taken from the generator.

M-g sets used for converting large amounts of ac power to dc are made with either an induction motor or a synchronous motor driving the generator. Each motor type has certain advantages, depending upon the application.

A common application of motor-generator converters is in commercial and industrial emergency power and lighting systems. A typical setup might have a dc motor and an ac generator. In the event of failure of the normal ac supply, an automatic switch will connect storage batteries to the dc motor which in turn will drive the ac generator and supply ac power to the emergency circuits. Another arrangement might have an ac motor driving a dc generator which is charging storage batteries used for emergency lighting.

Synchronous Converter

A disadvantage of the motor-generator set is that it requires two machines, taking up considerable floor space and presenting a twofold maintenance consideration. These problems are eliminated by the synchronous converter, also called the rotary converter. The synchronous converter is a single machine which can convert large amounts of ac power to dc power, and vice versa. Compared to the motor-generator converter, it is more efficient and economical.

The synchronous converter consists of a rotating armature with a commutator, slip rings connected to the armature and a winding structure to provide the necessary magnetic field. In a typical unit, alternating-current is supplied to the slip rings and direct-current is taken from the commutator through carbon brushes. When operated in this way, the machine is said to be a direct synchronous converter. Another unit might have dc power supplied to the commutator through the brushes and ac power taken from the slip rings. This unit is commonly called an inverted synchronous converter or simply an inverter.

Frequency Converters

In modern commercial and industrial electrical systems, it is often desirable to change the frequency of alternating-current power to meet the demands of a special application. There are many cases where electric power can be more effectively, efficiently and economically utilized at a higher or lower frequency than that frequency at which it is available. For instance, induction heating equipment generally requires ac power at a frequency anywhere between 500 and 10,000 cycles, although the plant will have a 60-cycle ac distribution system. Other applications which have to be powered from a 50 or 60-cycle ac system are: high-frequency power tools, 120 and 180 cycles; electric traction (streetcars, trains), 25 cycles; high-cycle motor testing equipment, 360 cycles and higher.

A frequency converter or frequency changer, as it is often called, is a device or combination of devices which will take an ac input at some frequency and provide an ac output at some other frequency. Frequency converters are of two types: rotating type and static type. The rotating type of frequency converter is generally an m-g set in which the motor is designed to operate at the available frequency of ac supply and the generator is designed to provide power output at the desired frequency. In a typical installation, this might mean a 60-cycle motor fed from the distribution system, driving a generator with a 400 cycle ac output which is operating high-frequency fluorescent lighting equipment.

Static frequency converters use mercury-arc rectifying devices in special circuits and have been used for high power conversions from 60 to 25 cycles and for converting from low-frequency ac to energy at several thousand cycles, as used in induction heat treating of metals.

Phase Converters

Another type of converter is the phase converter. This device is used to change single-phase ac to three-phase ac, and sometimes vice versa. It may be either a rotating machine or a static device. And a rotating phase converter may be either an m-g set or a single-machine converter.

An m-g set used for single to three-phase conversion would, of course, consist of a single-phase motor driving a three-phase generator. A single-machine phase converter is actually an induction motor to which single-phase power is fed and from which three-phase power is taken. This is commonly used in electric railway applications.

At least two companies are making static phase converters, using transformers and capacitors. These compact, efficient devices are currently finding widespread application in farm and other areas where only single-phase ac power is available. In such areas, the phase converter makes possible the use of three-phase motors, which are better suited to many jobs than are single-phase motors.

It should be noted here that simple transformer hookups are capable of converting ac power from two-phase to three-phase and from three-phase to six-phase.

Converter "Packages"

In addition to the large power commercial and industrial types of converters described above, there are many small portable plug-in units which are also called converters. These are usually electronic, rectifier or vibrator devices housed in small ventilated steel enclosures and equipped with connecting cables. Such units are used to convert ac to dc, low-voltage dc to high-voltage dc or low-voltage dc (6 to 12 vdc) to 120 vac. All of these are low power units, used for such applications as electroplating, battery charging, radio and electronic power supplies and operation of ac appliances from dc circuits.

Next Month: Switches

O.Z. pull boxes
SAVE TIME!
SAVE SPACE!
SAVE MONEY!
HEAD "B"
ASSEMBLED PULL BOX
TYPE "B" INSULATED BUSHING
JUST TWO SIMPLE ASSEMBLY STEPS
The easiest, most economical way to speed installation of conduit—of any size from ½" to 6"—is to use O. Z. Pull Boxes. Two hot dip galvanized malleable iron units fitted to an oversize length of pipe replace the conventional, bulky and costly pull box . . . cuts labor time in half!
O. Z. Pull Boxes are available in four designs: standard (Type "PB"); weather-tight (Type "PBW"); explosion proof and thin wall conduit. The oversize sleeve can be cut to required length "on the job" from standard conduit, or furnished to your specifications by O. Z.
Call your local O. Z. distributor, or write direct to the company for complete information.
OVERSIZE SLEEVE
1. Slide head "A" with sleeve over the conduit end. Attach head "B" on opposite conduit.
TYPE "PBW"
SLIDING HEAD "A"
SET SCREWS
CONDUIT
2. Simply pull cables, loop and feed back into oversize sleeve. Slide head "A" with sleeve into position and screw sleeve into head "B". Tighten set screws to lock "A" in position.
O.Z. ELECTRICAL MANUFACTURING CO., INC.
262 BOND STREET · BROOKLYN 17, N. Y.
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CAST IRON BOXES
CABLE TERMINATORS
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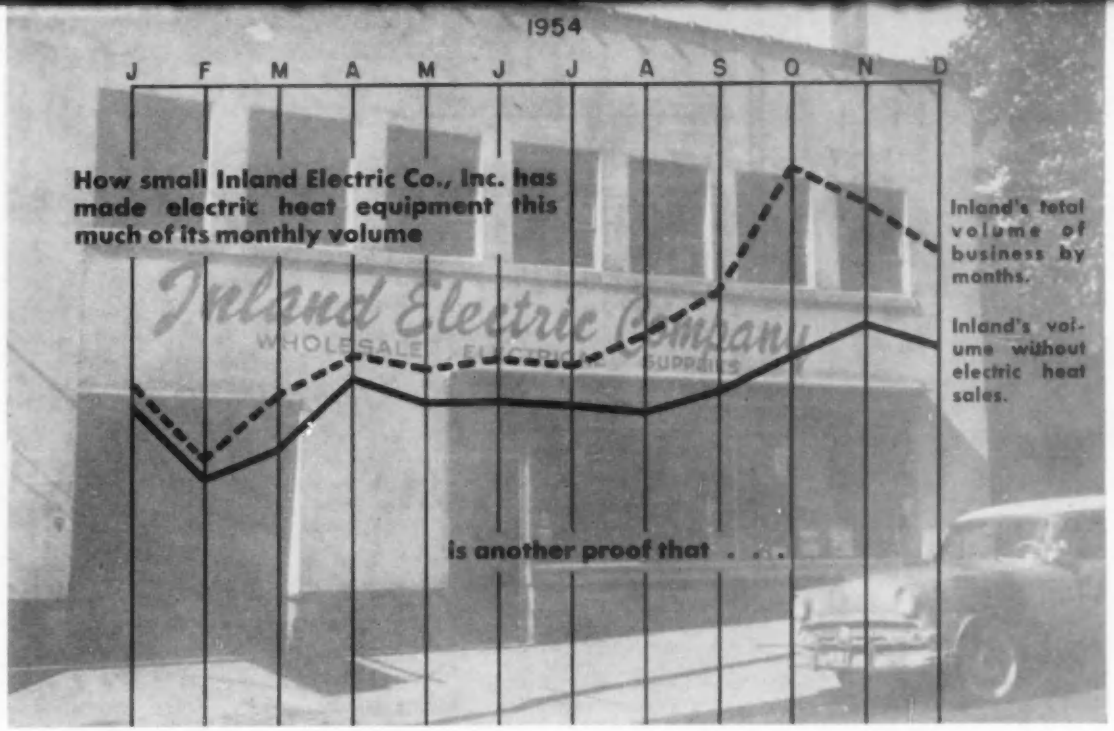


Distributors Have a Future In

SELLING ELECTRIC HEAT

By Howard J. Emerson

A FIFTY per cent increase in sales during some months of the year is being enjoyed by Inland Electric Co., Inc., Spokane, Wash., because this small electrical supplies distributorship decided three years ago to give attention to the market for electric heating equipment.

In 1954, Inland sold through its contractor-dealers 4,583 units of electric heating equipment of which less than 300 were portable heaters. But these unit figures tell only part of the importance of electric heat to this distributor and his contractor customers. To Inland's partners R. E. Franks and C. A. Pierce, and their specialist salesmen Verne Ritter and Harold Wyman, they mean sales of goods carrying an 18 per cent minimum to 27 per cent quantity discount for the distributor. Sales of these electric heating units mean a more than 100 per cent increase in the value of the service entrance and distribution supplies sold for each new home or commercial building. For each modernization job, the sale of electric heat brings many sales of complete 200-amp. service and rewiring supplies where otherwise a few new outlets would constitute the electrical job. To Inland's contractor dealers, attention to electric heating is moving home wiring jobs from a $300 average to $1,500 or more each.

• **Big Opportunity**—Electric heating represents one of the new frontiers for creative selling by the electrical industry. With 20 manufacturers now producing $12 million worth of electric heating equipment yearly, the business is small compared to the production of equipment for other fuels. But, within 10 years electric heating equipment is expected to represent more than a quarter billion dollars at retail level yearly, not counting the value of associated electrical supplies necessary for any electrical heating installation. To electrical supplies distributors, the electric heating market is expected to represent more than $50,000,000 yearly, according to figures given to NAED.

Only in the Northwest and the area of the TVA has electric heating equipment shown its potential as a profitable volume item for the electric supplies distributor. In these areas, supplies distributors have been selecting and developing merchandising contractors capable both of selling electric heat at retail level and installing systems that will bring customers satisfaction.

• **Complete Line** — Inland Electric Co., Inc. of Spokane is one of these distributors. With its lines of Berko radiant glass heating panels, Cavalier cone-type wall and convector-type baseboard heaters, Everwarm radiant ceiling cable, Markel fan-equipped nichrome element units, Roberson convection-type baseboard, and other brands, Inland has become a good example of what electric heating can mean to the small distributor.

Where Inland Electric finds its market for electric heating equipment and how this distributor builds a profitable volume through merchandising, is seen in the following word-and-picture analysis.

Turn page for more

"We've Only Scratched

Partner Clarence A. Pierce . . .

"WE have barely scratched the surface of the electric equipment heating market in this area," says C. A. Pierce of Inland Electric Co., Inc. Yet Inland, plus such big independents as Columbia and Tubbs as well as the local branches of the three chains, is selling electric heating equipment in a market area that is colder than New York, Boston, Cleveland, and St. Louis, and about the same as Chicago and Omaha, according to ASHVE tables. Spokane is figured at 6,318 degree days with a design temperature of —15 degrees.

In such a climate, how can electrical contractors sell electric heat jobs in competition with the well established merchants of heating systems using other fuels? The answer comes in a combination of a relatively low rate for electric power and a relatively high cost of competitive fuels.

Prospects for electric heat in the Spokane area get electric power from Washington Water Power as low as 1.2 cents a kilowatt with no demand rate. In the Yakima area, Pacific Power & Light's heating rate is close to 1½ cents a kilowatt with a demand rate, balanced somewhat by a climate warmer than Spokane.

• **Electricity Surges** — In many rural areas and in the Columbia Basin the REA's and PUD's (Public Utility Districts) rates go as low as 7 mils a kilowatt. Oil as a heating fuel has been cutting heavily into coal for many years but the cost has doubled in the last 10 years, and there is no regional source of fuel oil. Coal is expensive locally—one yard in Spokane sold 12,000 tons of coal in 1946, was down to about 4,000 tons in 1954. Natural gas is the question mark for future electric heat sales, for the pipe lines are on their way in from New Mexico and will be interconnected with Canadian sources. Many in the electrical industry feel that the gas will hurt the oil business much more than the electric industry, and in fact it may help electricity by driving up the cost of oil for home heating if the gas cuts heavily into oil for industrial power.

The electric heating equipment activity of Inland and other distributors in this area is being helped considerably by the promotional activities of most electric utilities. In the territory of the Washington Water Power Co., the Inland Empire Electrical League has underway an electric heating promotion that will use 862 inches of newspaper space in 82 advertisements between July 10 and Sept. 14, plus 225 radio spots over stations in eastern Washington and Idaho. The REA's and PUD's are promoting electric heating in every manner possible and permissable in order to get this extremely valuable winter-time load on their lines to balance the heavy summer irrigation load for which their systems must have peak capacity.

• **Many Markets** — In this climate, helped by industry enthusiasm, Inland Electric Co. is selling electric heating equipment successfully through its contractors to new homes, remodeled homes, motels, apartments, business concerns, banks, restaurants, light industry and others.

The majority of electric heating installations sold by Inland's dealers are to modernize old homes, either replacing a complete system using other fuel, or to heat additions of bathrooms, bedrooms, playrooms, workshops, etc. So far, radiant glass panels that fit flat against the wall without structural changes have taken most of the conversion jobs, although convection baseboard units are getting increased attention from the public. Most contractors in eastern Washington are charging the home owner $10 for installation of each radiant glass panel, $75 for complete new service entrance or $25 for minor changes in service entrance. The average 2-bedroom home of 900-1,000 sq. ft, can be converted to electric heat by Inland's contractors for about $600—of which about $400 goes to Inland for the electric heating units and associate electrical supplies.

The new home market being sold by Inland's contractor-dealers varies in types of equipment used according to the type of builder and the cost bracket of the home. Groups of low to medium priced homes being built on speculation are the big market for the cone element or nichrome element electric heating units. Homes built for individuals lean more to radiant glass panels or to ceiling cable. For the average new two-bedroom home, the heating units represent to distributor Inland Electric about $500 if radiant glass panels, about $300 if cone or rod element type, or about $300 if radiant ceiling cable, including in each case the thermostats but not the extra supplies required for disconnect and distribution of the heating load.

Motels and apartments are another large market for Inland's contractor-dealers. It is common practice for travelers in the Mountain States and the Pacific Coast to look for motels with "Electric Heat" or the rare "Steam Heat" signs in order to avoid the odor and type of air the traveler associates with unit heaters using other fuels. To the motel owners, electric heat offers not only its sales value but the opportunity to provide a quick, controlled heat to only those units that are occupied.

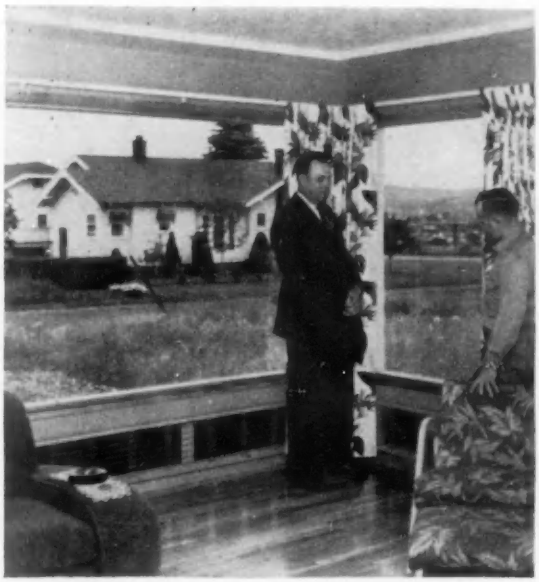
• **Commercial Market Small** — Heating commercial buildings is not yet a sizeable market in the downtown sections of the larger cities where the buildings long have had central heating systems. But the post-war development of suburban shopping centers with many small stores, offices and restaurants either in separate buildings or in units of spread out buildings without central heat, has opened a fertile market for the electric heating sales story of Inland Electric and its contractors.

A few of the more important markets that Inland Electric Co., Inc. is selling through its dealers are seen here in ELECTRICAL WHOLESALING photos.

the Market for Electric Heat"

MODERNIZING older homes with electric heating is biggest present, future market for Inland and its contractors. Even minor service entrance changes (above) mean extra supplies sales along with the electric heat units.

REPLACING old heating eliminates flues, saves space, customer agrees as contractor Pascal Hancock (left) of City Electric, Grandview, Wash., and Inland's salesman Harold Wyman check glass panel reheating job.



NEW HOME installations, such as these low boy panels, are setting pace in building public acceptance of electric heating. New homes are also Inland's big market for radiant ceiling cable installations in either plaster or dry ceilings.

CONTROL and distribution gear for electric heating systems easily doubles value of supplies for each home. Normal wiring job on this home: $350 for required 200-amp. service. With electric heat, contractor Sutton's bill came to more than $1,600.

For how Inland sells this market, turn page

Partner Robert E. Franks . . .

"The Distributor's Success Depends On Merchandising Contractors"

"ANY distributor's success in selling electric heating equipment can be attributed directly to his ability to develop merchandising contractors in each market center of his territory," says R. E. Franks of Inland Electric.

"Disappointments that some wholesalers may have had with electric heat as a volume item seem to be caused by their classifying the heating units as traffic goods like service entrance equipment and other electric supplies for the home wiring job. Any distributor who expects any volume in electric heating equipment through his regular methods of getting contractor business is not going to be very happy.

"Electric heat requires a consumer selling effort equaled by no other electric item except the electric range and water heater. The contractor no longer has any need to sell the value of electric motors against steam engines, or to sell the home owner on electric lights instead of gas lamps—but the tremendous market for electric heating equipment comes only through convincing the owner of a building that electric heat has advantages over heating with competitive fuels. The merchandising contractor is the best man to do this convincing. Making the contractor into a merchandiser of electric heat is the distributor's basic job."

Inland Electric Co., Inc., has been applying to the selling of electric heating equipment substantially the same marketing techniques used successfully by major appliance distributors.

• **Key Contractors**—In the field, Inland's staff has been working toward setting up one strong merchandising contractor in each community or market area. This contractor is given the overall picture of the electric heating market, the lines carried by Inland and their competitive features, the background of Inland Electric Co. and its policies of service, at general meetings—usually evening banquet meetings attended by as many as 60 contractors and their wives.

The individual contractor is assisted with materials and guidance in setting up an attractive and functional showroom for electric heating units. Then the Inland staff holds meetings for the contractor and his staff to train

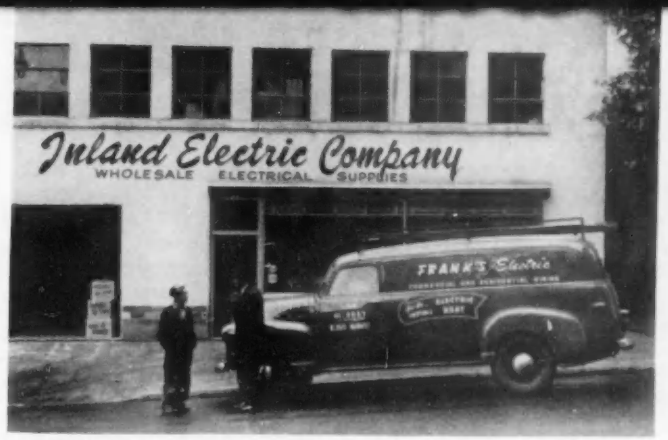
MOTEL installations, giving quick, clean, odorless heat that can be used only when units are rented are causing motels to go all out for electric heat. Here, Sutton and Pierce examine one of 13 self thermostat nichrome element units used.

NICE business for contractor and distributor in motel electric heating is seen here. System required two 200-amp. disconnects, two 200-amp. breaker panels, one 100-amp. breaker panel, 700 extra feet of #12 cable, 15-ft. of 3-in. conduit.

them in the techniques of selling electric heat. "One of the toughest problems we face is to get a contractor to understand that he can ask a prospect for a $1,000 order without embarrassment—and usually get the order," says Bob Franks.

Periodically, representatives of Berko, Cavalier, Everwarm, Markel, Roberson and other lines go on visits to the contractors with Inland salesmen to help build enthusiasm for the individual types of heating and the brands they carry, to answer questions on the basis of experience elsewhere throughout the Northwest with electric heating installations, and generally to boost the contractors' enthusiasm for the market.

• **Specialist Aid**—Inland's contractor-dealers have the services of this distributor's salesmen-specialists for help either at the shop or in the field. Inland's Yakima Valley salesman Harold Wyman lists five major jobs in the field with those of his contractors who sell electric heating jobs: 1. To help figure heat loss, number and spacing of heating units, on prospective jobs that present unusual problems; 2. To check the wiring service and placement of units in relation to the type of unit being used as the job progresses; 3. To help contractors figure, and sell, features of an electric heating job required to conform to local codes (some localities will not permit a unit over 2 kw., others permit units up to 5 kw. in size); 4. To help the contractor not only in sell-



ENTHUSIASM on the part of its contractors is one of the salesmen's goals at Inland Electric Co. In many cases, they have contractors identifying themselves with the electric heat market through truck signs, in their yellow page listings on all letterheads and in direct mail.

PROMOTION by contractors of their place in the electric heat industry is becoming more common and more effective as more Inland customers like D. G. Quinton arranged their storefronts to feature electric heat in competition with the merchants of other types of heating systems.

APARTMENTS are growing market for Inland's electric heat merchandising contractors, particularly with trend to spread-out "garden apartment houses." Here, Pierce examines Heatsum electric baseboard in a nearly completed living room.

TYPICAL of business end of an electric heating job is service entrance for one three-family unit of Spokane apartment house. It feeds six 2000-w., one 4000-w. and four 1750-w. baseboard heating units, plus three 1250-w. #230 Heetaires.

For more on merchandising contractors, turn page

ing the advantages of electric heat but also in selling the builder or remodeler on the insulation, etc., that will make the heat job practical; 5. To go out to customers when serious complaints come, to solve the problems which may be use of thermostats, placement of furniture, etc., more often than it is the fault of the heating system.

• **Specifying Important**—As important as any other single feature in the relationship of Inland Electric to its contractor dealers is the effort by executives and salesmen to help these contractors understand and carry out the specifying of each electric heating job so that it will produce a satisfied customer when the thermometer goes below zero and when the customer pays his electric utility bill. It is not an easy job, for the distributor in the first place and later for the contractor —for specifying is basically a heating engineering job. Inland and many other reputable supplies distributors in the Northwest are struggling to keep the selling of electric heat respectable —and they are doing it against serious odds. Some brands of electric heating equipment are being retailed through outlets whose personnel have neither knowledge, facility or interest to specify an adequate electric heating job that will produce a satisfied customer and another advocate of electric heat against competitive fuels.

Inland believes that the electric supplies distributor must train his contractor-dealers to: 1. Specify heating jobs accurately; 2. To turn down jobs where the customer, architect or builder demands an installation less than minimum for the building. To carry that principle out, Inland's staff works closely with the contractors to train them in specifying the electric heating needs of any building according to ASHVE standards related to the capacities of the brand and type of equipment being considered.

• **Insulation a Headache**—A basic problem to Inland and its contractors are factors over which neither has any direct control—particularly insulation. Inland's contractors are encouraged to spend as much time with a prospect selling the necessity of adequate insulation as they are in selling themselves and their electric heat units. The contractors must convince the building owner on the necessity of putting in the amount of insulation in ceiling and walls specified by the manufacturer of the electric heating equipment, plus storm windows and storm doors. Most minimum specifications call for the equivalent of 4-in. rock wool in ceiling and 2-in. in walls, and ceiling cable jobs require more. With most tract homes carrying 1-in. in ceiling and building paper in the walls, it can be seen that the cost of properly insulating a home for electric heat adds to the selling job. Particularly when heating units using other fuels can be placed in these homes, and will be put in by heating contractors with or without insulation.

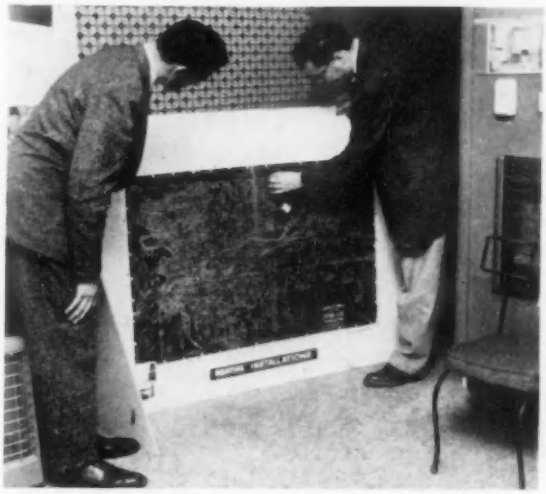
Inland's contractors are trained to have a knowledge of insulation and how to figure its value to any electric heating job in terms of both the initial investment in the electric heating units as well as in terms of monthly savings in fuel costs over the depreciation period of the home.

• **Work With Utilities**—Along with this distributor-salesman-contractor relationship is a business building program designed to procure electric heating leads for Inland's dealers. In many areas of its territory, Inland has an opportunity to provide stuffers on its lines of electric heating equipment to the REA's and PUD's for enclosure in electric bills to consumers. Frequently, too, these utilities offer space in their offices or showrooms for display of electric heating equipment. Inland helps and encourages its contractors to take full advantage of the opportunities.

In each locality throughout Inland's territory, contractors are tied in with manufacturer - distributor - contractor sponsored newspaper advertising featuring the advantages of electric heat, the competitive features of the brand, and the experience and integrity of the electrical contractor-dealer. In many

DISPLAYS and demonstration areas are developed by salesmen Ritter and Wyman to step up floor sales. Ritter automatically checks over display on arrival for his regular call on Spokane merchandising contractor, D. G. Quinton.

TECHNICAL assistance is offered to Quinton in specifying a home heating job. Such help by salesman Ritter helps contractors to meet new problems, also helps to adapt Inland's brands of electric heating to the job's specifications.



MARKET DEVELOPMENT assistance is another service given by Ritter to help build contractor-dealers who are strong merchandisers of electric heat. With Quinton, he checks city sections that are proving most lucrative market for promotions.

COORDINATING Inland's supply of electric heating units and related supplies with contractor's schedule is another service Inland's salesmen offer contractor superintendents like Quinton's experienced Paul Peterson (left).

MANUFACTURERS' REPRESENTATIVES are kept in close touch with Inland's contractors to build brand enthusiasm, product knowledge and industry contacts to solidify contractor's relationship with distributor. Yakima salesman Wyman

(left photo) looks on while Everwarm's F. D. Bartlett shows thermostat-controlled display to contractor John Young. Right photo, H. D. Campbell, representing Roberson, explains new clock thermostat to Young on visit with Wyman.

small cities, such newspaper advertising is supplemented by similarly sponsored radio programs providing 25 spots a week. In Spokane and Yakima, similar three-way sponsorship of one-half hour television programs using live announcements is helping build electric heat business for this merchandising distributor and his contractor dealers.

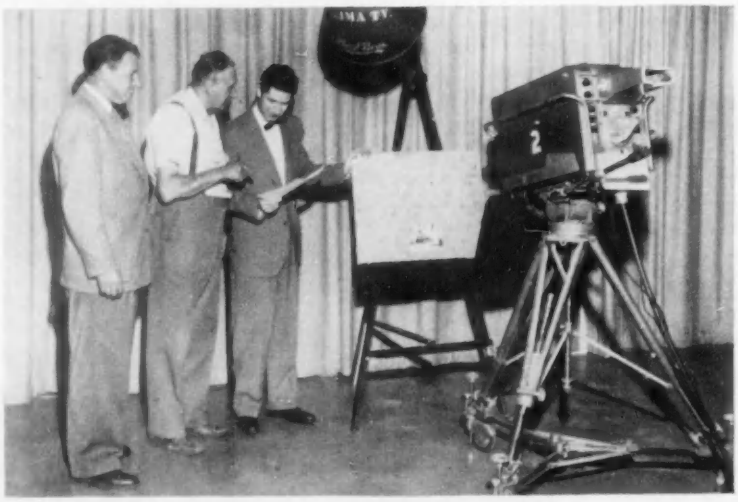
• **Low Cost TV**—In Yakima, for example, the half-hour over local KIMA on Ch. 29 and its satellite on Ch. 19 costs $210 for a popular film show broken by 3 live spots. Berko handles $105, Inland Electric pays $52.50 and two area dealers, Young Electric, Yakima, and City Electric, Grandview, each pay $26.25. The live spots enable the showing of radiant glass panels, pictures of installations by both contractors, and gives each dealer a chance to appear on the show to create a personal relationship. Each week, 55,000 TV-equipped homes in the Yakima Valley are exposed to this promotion of electric heat—and at the moment KIMA and its satellite provide the only local program for these homes—reaching a virtually captive audience of prospects.

Seeking, selecting, developing and servicing of its contractor-dealers is daily routine to the staff of Inland Electric Co., Inc., as this distributor merchandises electric heating equipment. Many of the activities associated with the development of this market are seen in this ELECTRICAL WHOLESALING photocoverage of salesmen Verne Ritter in Spokane and Harold Wyman in the Yakima Valley.

For more on merchandising contractors, turn page.

JOB PROGRESS calls are regular part of Wyman's work with electric heat selling contractors. Thorough familiarity with his lines and experiences with other contractors gives salesman the ability to help save time and money on job like this.

JOB COMPLETION check is always made. Wyman and Hancock check job with 22-kw of installed heat, 32 baseboard units. It required two double-pole, single-throw relays, a 40-circuit panel, 200-amp. main pull-out, 104 S breaker.



HELPING PROMOTE business for his contractors, Wyman works with Young and TV director Joe Ryan on half hour film show script with live spot commercials. A $210 coop three-way program with Berko costs contractor $26.25.

GENERAL PROMOTIONS of electric heating carried by Inland are used all year, when opportunities occur. State and county fairs are used through the season with contractors manning the booths, sharing the displays. Left is photo of Inland's display at a country fair; right is photo of a booth used in mammoth home show sponsored by Inland Empire Electrical league at Spokane, Wash. Booths are designed and manned to do maximum selling job to public through contractors.

"Electric Heat Fits Into the Wholesaler's Organization"

ELECTRIC heating equipment fits into Inland Electric Co.'s office and warehouse procedure with little trouble. It requires more attention than would an additional wiring device, less attention than would a line of automatic washers or TV, about the same attention required by a line of built-in ranges.

To Inland's purchasing agent, Jim Withers, the concern's interest in electric heating equipment merchandising means buying with regard to the seasonal needs and the balance between types of heating equipment in demand. Withers keeps Inland's inventory at a 60-day level during most of the year—letting it drop to a stock of about 100 to 200 units during January to June.

In the spring, Withers starts the orders that bring the distributor's inventory to a level of more than 1,000 units of electric heating equipment for the season that begins early in July and continues with its peak in October to the first hard frost in December. He balances inventory to provide for a greater need for ceiling cable in the summer months of new home construction, glass panels and baseboard units for the fall period of remodeling and conversion, cone and rod type more evenly balanced through the season.

Purchasing Agent J. J. Withers . . .

ELECTRICAL WHOLESALING's camera shows how well electrical heating equipment has fit into the Inland organization and some of the ways the concern is featuring it.

INLAND'S INSIDE STAFF is thoroughly trained in the development of the electric heat market and in servicing merchandising contractors. Bert Loucks (center), on quotations and Art Reuland on pricing, are salesmen's right arms in keeping electric heat contractors happy with Inland's service and support.

EXTRA supplies make stack of 200-amp. breaker panels common sight at Inland. Without heating, 100-amp. light and range panels might be heaviest gear.

DISPLAYS to impress and influence contractors and the staff at Inland's counter are shown by Wither and Pierce. Another display runs along wall and all Inland's trucks carry large signs featuring the value of electric heat.

DEMONSTRATION ceiling cable display at Inland shows how it's installed in wet and dry construction and hidden.

Available Black or Red

AIR CONDITIONER EXTENSIONS

Gray Type S cord

for volume...for profit

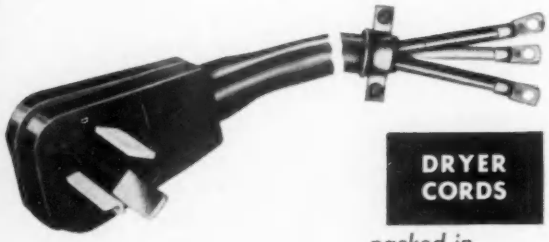
ROYAL ELECTRIC

America's FINEST and MOST COMPLETE line of

MOLDED CORD SETS

RANGE CORDS

packed in individual boxes



DRYER CORDS

packed in individual boxes

SAFE • DURABLE DEPENDABLE

You just can't beat a Royal Electric molded cord set! Royal combines skillful engineering, production "know-how", and UL listed component parts to build a complete and diversified line of highest quality, for a wide range of uses. Write for full catalog information.

- FULLY UL LISTED
- ROYAL ELECTRIC QUALITY RUBBER JACKETED CORD
- MOLDED-ON RUBBER CAPS and CONNECTORS
- BUILT-IN STRAIN RELIEFS

buy ROYAL . . . you'll SELL better

ROYAL

ROYAL ELECTRIC COMPANY, Inc.
PAWTUCKET • RHODE ISLAND

Manufacturers of
WIRE • CORD SETS • PLUG and CARTRIDGE FUSES • WIRING DEVICES • CHRISTMAS LIGHTING

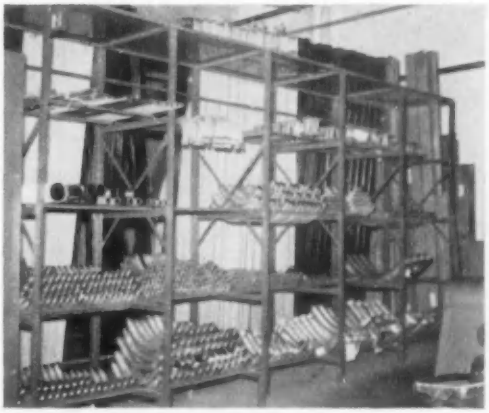
In the Showroom . . .

A LARGE VARIETY of lighting fixtures can be shown in a small space on these recessed sliding panels. When panels are moved, an electrical contact lights fixtures.

OWNERS Harold Newman (left) and Sol Newman inspect the new facilities. Wall pegboards in background can be used to vary the displays of merchandise.

And the Back of the House . . .

A MANUFACTURERS' LITERATURE file is near desks of outside salesmen. Material can be changed often, and empty spaces are spotted for new literature received.



A RACK for all sizes of elbow pipes permits easier and faster handling by warehouse clerks. Additional space can be added to the top of the rack as more material is needed.

It's Built on Flexibility

DESIGNED for flexibility to serve the customer better. That's the slogan at West Philadelphia Electric Supply Co., which recently moved into new and larger quarters.

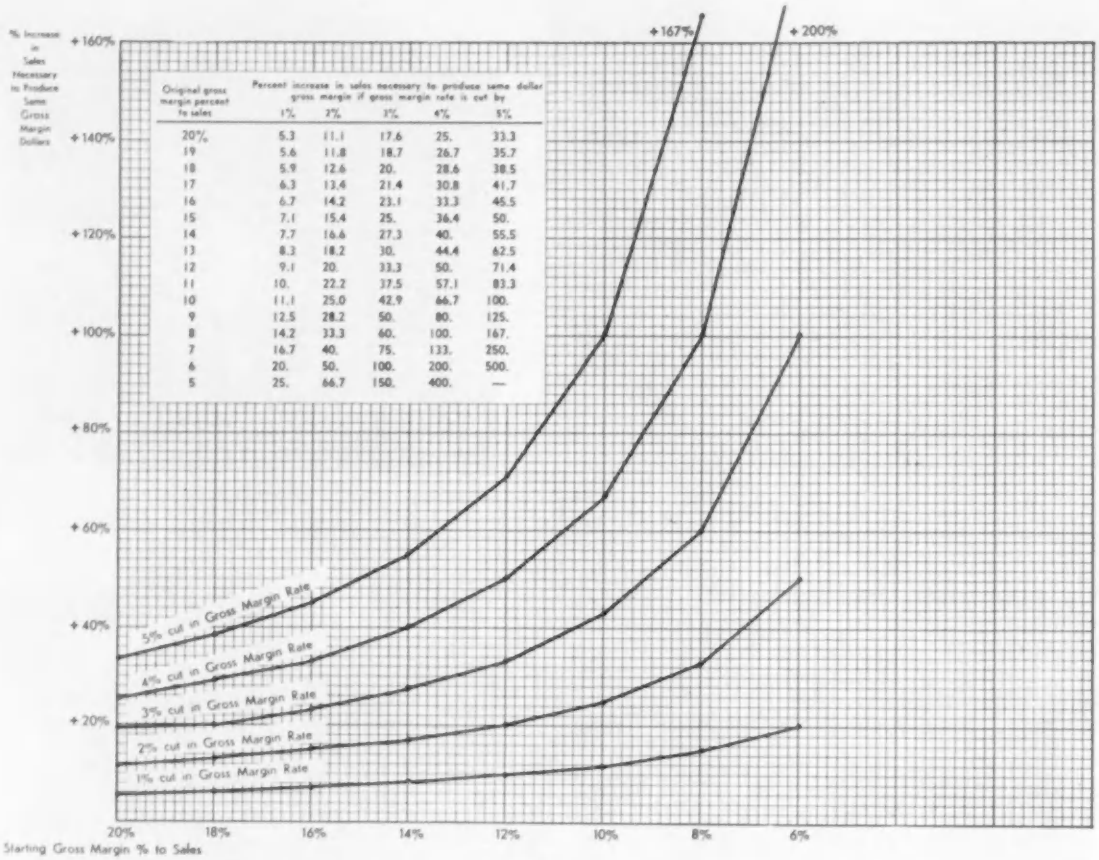
Until three months ago, the company consisted of a main house and two warehouses in different locations. Now, operations are housed in a two-story unit with enough space for future expansion.

• **Ceiling Panels**—Readily adjustable to changing conditions in the showroom are individual plywood ceiling panels—8x24 inches—which can be easily removed. Blank panels can be attached to the ceiling if a fixture is not desired, thus eliminating a problem of decoration. Current is provided by electric strip above the panels permitting connections on any part of the ceiling. About 450 different fixtures, including a separate display for outdoor lighting, are available in the showroom.

The new policy of the company is to upsell the public. In one particular display, 120 fixtures are attached to sliding panels which occupy less space than if mounted on one side of a wall. Working on the theory that customers purchase those items they can easily see, President Sol Newman has placed the more expensive fixtures on the front panels and the least expensive ones at the rear.

During the stocking of the remodeled building, which at various times

Continued on page 100



Original gross margin percent to sales	Percent increase in sales necessary to produce same dollar gross margin if gross margin rate is cut by 1%	2%	3%	4%	5%
20%	5.3	11.1	17.6	25.	33.3
19	5.6	11.8	18.7	26.7	35.7
18	5.9	12.6	20.	28.6	38.5
17	6.3	13.4	21.4	30.8	41.7
16	6.7	14.2	23.1	33.3	45.5
15	7.1	15.4	25.	36.4	50.
14	7.7	16.6	27.3	40.	55.5
13	8.3	18.2	30.	44.4	62.5
12	9.1	20.	33.3	50.	71.4
11	10.	22.2	37.5	57.1	83.3
10	11.1	25.0	42.9	66.7	100.
9	12.5	28.2	50.	80.	125.
8	14.2	33.3	60.	100.	167.
7	16.7	40.	75.	133.	250.
6	20.	50.	100.	200.	500.
5	25.	66.7	150.	400.	—

Why Price-Cutters Can't Win!

Chart published by NAED is designed to help the distributor visualize the effects of the price-cutting cycle and to show him how to face the problem realistically and handle it on a business-like basis

WHAT is the calculated effect of any degree of price-cutting? Can it be harmful to all concerned? And what are the additional expenses involved in the action?

These are some of the questions answered in a chart recently published by the National Association of Electrical Distributors, which analyzes the calculated effect of price-cutting and the almost impossible task of recouping by increased sales the gross margin dollars lost or given away by such price-cutting.

The chart and an explanatory bulletin on the subject will be distributed to NAED members to help the distributor visualize the entire problem of the present price-cutting cycle and decreasing gross margin rates. Its purpose is to help him face the problem squarely and handle it on a business-like basis.

• **Reason For Decrease**—The present cycle of decreasing gross margin rates is due largely to price-cutting, according to the association, without calculating the exact effect on the gross margin necessary to cover expenses, and the difficulty in recouping enough to assure an adequate net return on investment.

This is usually stated as the per cent increase in sales necessary to produce the same gross margin in dollars as would have been produced if the normal price and gross margin had not been cut by a specific percentage reduction in the gross margin percentage to sales.

The almost impossible task of recouping—by increased sales—the gross margin dollars lost or given away by price-cutting is shown by the chart. Any sales increase attained, in excess of the rate of increase prevailing in a specific locality, means taking it away from the competitor, and in self defense in the battle for survival, the price war is intensified and the downward trend of gross margin rates becomes more disastrous.

• **Additional Expense**—Another loss is incurred because of the additional expenses of securing and handling the increased sales volume, necessary to offset the lost gross margin dollars.

We're Proud To Announce To The Electrical Industry

THE NEW, SCIENTIFICALLY DESIGNED

BREIDERT POWAIR-X-HAUSTER

The Proof of the merit of a new product is the acceptance it meets in the field. *The New Breidert Powair-X-Hauster is being specified by architects and consulting engineers everywhere across the country!* They know that the Breidert name has stood for the finest ventilating equipment that money can buy, since 1939.

The Reasons why the new Breidert Powair-X-Hauster has met with such outstanding success:

- Completely new design.
- Power driven ventilator with a pleasing low silhouette PLUS unusually large capacity.
- Discharges foul, contaminated air HORIZONTALLY.
- Does NOT discolor or harm roofing materials the way ordinary ventilators that discharge downward do.
- Does not down draft when motor is off.
- Motor is kept cool and trouble free by ingenious use of outside air.
- Hard selling national advertising campaign reaching top level executives vitally concerned with proper ventilation of commercial and industrial buildings.

Representatives in 57 cities.

THE G.C. BREIDERT COMPANY

Box 1190, San Fernando, California

THE REWARDS

The best way to measure the great opportunities open to you as a Breidert Jobber is to talk to one of our representatives. For the name of the representative nearest you who will be happy to explain our jobber policy . . . please mail the coupon at right.

I would like to become a Breidert Jobber. Please send information to:

NAME _____

ADDRESS _____

CITY _____ STATE _____

G.E.'s 7 quality extras at no extra cost:

(1) Straight-in wiring for quick connections

(2) Slide-out interiors—plenty of working room

(3) Plenty of knockouts, properly located, easily removed

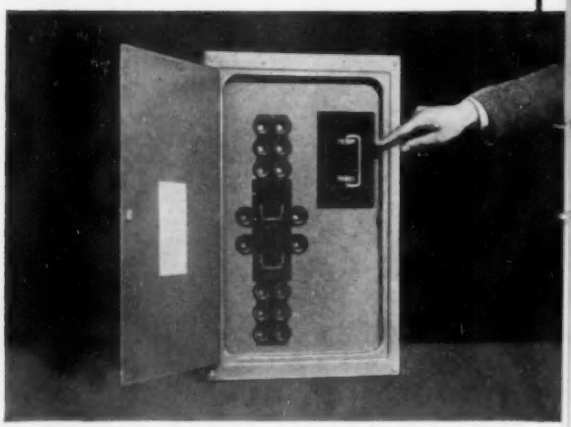
(4) Silver-plated copper current carrying parts for cool operation

(5) Snap-action fuse puller prevents partial contact

(6) Narrow, shallow box construction simplifies flush installations

(7) Bonderite* finish to resist corrosion

*Parker Rust Proof Company



100 amp series fuse puller combination, with 60 amp range and 30 amp branch fuse pullers; 12 or 16 plug fuse branches, Catalog Number TC 3217-16. Snap action pullers prevent partial contact. Quick, straight-in wiring—grips like a bear trap.

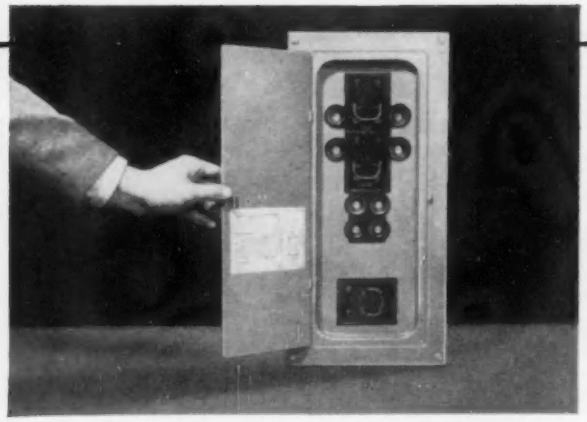
G.E.'s new fuse puller line features slide-out interiors, straight-in wiring and five other quality extras at no extra cost

Seven basic fuse puller devices designed to simplify your job from start to finish

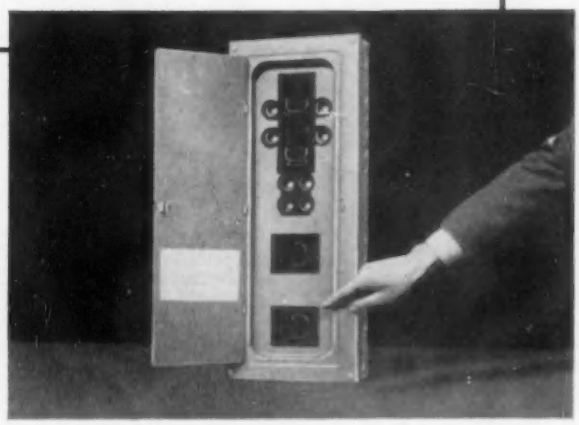
Here are 7 new G.E. fuse pullers—built with G.E.'s 7 quality extras for easier installations and better workmanship. Designs include parallel or series wiring and sealable pullers for independently metered equipment. U/L listed. Surface or flush mounted designs.

Check this list, tear out the ad, and see your G.E. Trumbull distributor:

- ☐ **60 amp series main fuse puller only; up to 8 plug fuse branches.**
- ☐ **60 amp series main and range fuse pullers (60 amp each); up to 8 plug fuse branches.**
- ☐ **60 amp series main and range fuse pullers (60 amp each); one 30 amp independent sealable fuse puller; up to 8 plug fuse branches.**
- ☐ **100 amp series main fuse puller, 60 amp range fuse puller and extra 30 amp fuse puller; 12 or 16 plug fuse branches.**
- ☐ **100 amp parallel main and range fuse pullers (60 amp each); up to 8 plug fuse branches.**
- ☐ **100 amp parallel main and range fuse pullers (60 amp each) and one 30 amp independent sealable fuse puller; up to 8 plug fuse branches.**
- ☐ **100 amp parallel main and range fuse pullers (60 amp each), one extra 30 amp fuse puller and one 30 amp independent sealable fuse puller; up to 8 plug fuse branches.**



60 amp series or 100 amp parallel fuse puller combinations, with 60 amp main and range pullers and 30 amp independent sealable puller, Catalog Numbers TC 2214-8 or TC 2219-8. Exclusive slide-out interior gives plenty of working room, requires no screws.



100 amp parallel fuse puller combination, with 60 amp main and range pullers; wired-in branch puller and independent sealable puller are 30 amps each, Catalog Number TC 22119-8. Narrow, shallow box simplifies flush installations.

GENERAL ELECTRIC

Conquer the Dark—
REVERE 2000 SERIES LONG RANGE REAR SERVICE FLOODLIGHT
Utilizes 750-1000 or 1500 Watt Lamps. 18" and 20" lens sizes. Lens remains stationary when servicing no breakage of glass—no loose parts to dangle in the wind or drop to the ground . . . weather-tight . . . all parts weather resistant. Finest Flood for sports lighting and similar installations where distance is a factor.
With Revere ELECTRIC MFG. CO. CHICAGO, U.S.A.
FLOODLIGHTS
FAMOUS REVERE 4200 SERIES ENCLOSED TYPE FLOODLIGHT
750-1000-1500 Watt Lamps . . . offers wide choice of beam control. Dust-tight, weather-proof double parabola design producing maximum light out-put for long range lighting installations. Built strong to withstand the rigors of day-in and day-out service. Flood can be inverted for easy, safe servicing . . . has rotation stop and degree markings for accurate setting.
FAMOUS REVERE 3800 SERIES OPEN-TYPE FLOODLIGHT
A masterpiece in design and construction. Accommodates 300-500, 750-1000-1500 Watt General Service Lamps, also 750-1000 Watt Bi-Post. Beautifully proportioned for high efficiency. Easy to wire and maintain. Has all adjustments on right hand side permitting serving from one position. Degree markings preserve all settings. Available in all aluminum or steel, porcelain enameled, in colors to match installation color scheme.
The above Floodlights typify the entire Revere Line which comprises units up to 5000 Watt capacity. Revere leadership in the field of Sports, Airport, Service-Station, Street, Industrial and Outdoor Theatre Lighting Equipment is based upon a reputation for superior design, workmanship and high efficiency. Electrical distributors who have made their comparisons are aware that their selling job is easier when the name Revere is mentioned. The quality can be depended upon and the line is broad—in a range of prices to meet all conditions. Use the Revere Catalog as your door opener to greater sales. Contact our nearest representative today.
REVERE ELECTRIC MANUFACTURING CO.
6011 BROADWAY • CHICAGO 40, ILLINOIS
Available in Canada thru Curtis Lighting, Ltd. • Leaside, Toronto, Ontario
THE COMPLETE LINE OF FLOODLIGHTS • LUMINAIRES AND POLES FOR SERVICE STATION
SPORTS • AIRPORT • STREET • OUTDOOR THEATRE • MARINE AND INDUSTRIAL LIGHTING

No other Type "G" switch

offers so much value for the money!

A LOOK AT THIS CHECK CHART PROVES IT!

	MURRAY SWITCH	SWITCH B	SWITCH C	SWITCH D	SWITCH E	SWITCH F	SWITCH G	SWITCH H
Solderless lugs in all devices	YES	NO	NO	YES	YES	YES	NO	NO
Multiple Padlocking in "On" and "Off" Positions	YES	NO	NO	YES	YES	NO	NO	YES
Complete rating information on handsome metal name plate	YES	NO	NO	NO	YES	NO	NO	NO
Positive-visible contact	YES	NO	YES	YES	NO	YES	YES	YES
Non-tracking porcelain base	YES	YES	NO	YES	YES	NO	YES	YES
Extra current-carrying capacity	YES	YES	NO	YES	YES	YES	NO	YES
Sturdy, long-lasting construction	YES	YES	NO	YES	YES	YES	NO	YES
Visible blades for ease of maintenance and inspection	YES	NO	YES	YES	NO	YES	YES	YES
Longer-lasting Melamine base gray enamel finish	YES	NO	NO	NO	NO	NO	NO	NO
Attractive modern styling	YES	NO	NO	YES	YES	YES	NO	NO

• Entirely redesigned and packed with sales features, the Murray Type "G" Line now offers new opportunities for increased profits.

But that's just *one reason* why more and more wholesalers are taking on this fast-selling switch line.

There are other reasons — like superior packaging design which makes it even more profitable to stock and ship Murray. Big, black and orange labels help counter men fill orders fast — while sturdy cartons minimize returns due to damaged merchandise.

And you can always count on quick, sure deliveries from strategically located, well-stocked warehouses.

Find out how profitable it can really be to handle Murray — use the coupon below for complete information.

Mail this coupon today for complete information on Murray Type "G" Safety Switches

Murray

"Quality doesn't cost ... it pays!"

Safety Switches • Service Entrance
Fuse Panels • Meter Mountings • Load Centers
Magnetic-Hydraulic Circuit Breakers

IN CANADA: MURRAY ELEC. MFG. CORP. (Canada) LTD. TORONTO, ONTARIO

Murray Manufacturing Corporation, Dept. EH-1A
1250 Atlantic Avenue, Bklyn. 16, N. Y.

Please send me complete information on Murray Type "G" Safety Switches.

NAME _____

TITLE _____

FIRM _____

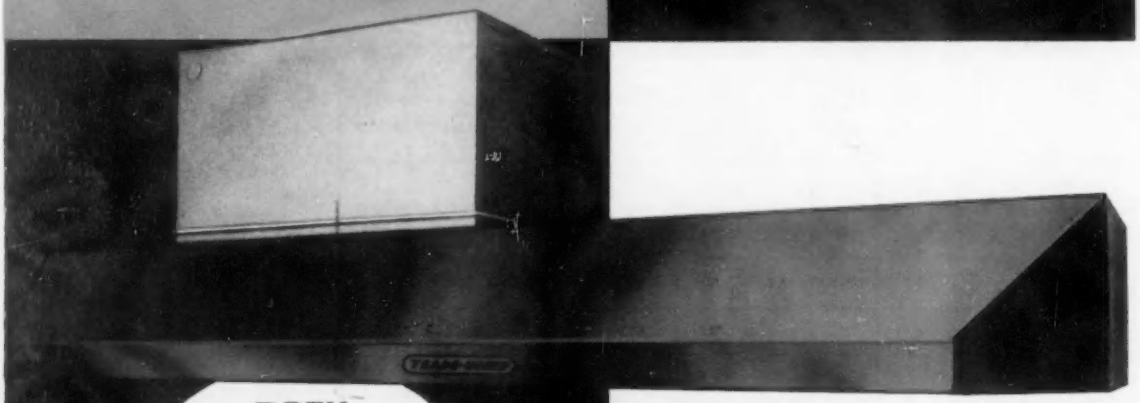
CITY _____ STATE _____

UNBEATABLE!

TRADE-WIND
HOOD/VENTILATOR COMBINATION

300 CFM
VENTILATOR

SOLID CLAD
COPPER HOOD



BOTH FOR ONLY $82.65 LIST

WITH GENUINE STAINLESS STEEL HOOD $71.65 LIST

FOR LARGER KITCHENS USE THIS 425 CFM MODEL 2501 VENTILATOR.

Also shown is the versatile Trade-Wind Expansion Hood—fits any cabinet from 30" to 54". Available in copper or stainless steel.

TRADE-WIND'S SUPER CLIPPER WITH TWIN INLETS, BUILT-IN FILTERS AND 550 CFM IS STILL TOPS.

Here it is shown with the functional Fold-Under Hood in stainless steel only. 39" or 42" lengths.

With the efficient 300 CFM Trade-Wind Model 1501 Ventilator and the stunning copper Stationary Hood you get top Trade-Wind performance and quality at a bargain price.

The hood is available in 30", 36", 39", 42" or 48" lengths — at the same price.

The Trade-Wind Filter Kit and Under-Hood Light can be added at slight extra cost.

Demand this unbeatable Trade-Wind value or any of the 15 other outstanding Trade-Wind combinations.

Trade-Wind Motorfans, Inc.

7755 Paramount Blvd., Dept. EW, Rivera, Calif.

MEMO *This and other NE ads help create demand among your customers for National Electric products.*

National Electric XDUCT conduits

These are the features that make the *new* National Electric Xduct Conduits sure winners with electrical contractors everywhere:

1. Easiest Fishing Conduit!

Xduct's new baked-on inside coating of aluminum enamel provides minimum friction between conduit wall and wires. The result: Fishing tests conducted with five other leading brands of conduit prove Xduct is 66% easier to fish on constant pull—more than twice as easy to start.

2. Maximum Corrosion Resistance!

Pure zinc is deposited *uniformly* over the entire outside surface of Xduct conduit by a new electroplating process. The result: a protective coating that adheres positively to the basic steel.

3. Positive Thread Protection!

Sharp, clean threads of Xduct rigid steel conduit are machined before galvanizing to assure complete protection from end to end. The result: every hill and valley of threads is completely galvanized.

4. Superior Working Qualities!

Xduct's high ductile steel assures easy cutting and threading, permits bending without flattening. This, plus the positive adherence of the electroplated zinc coating, means easier, safer fabrication right on the job.

National Electric Products

PITTSBURGH, PA.

3 Plants • 10 Warehouses • 36 Sales Offices

NATIONAL ELECTRIC PRODUCTS CORP. PITTSBURGH, PA. 50TH ANNIVERSARY 1905–1955

Write today for complete details on these outstanding NEW XDUCT CONDUITS. Send this coupon for your copy of this 12 page information booklet which tells the new Xduct story. IT'S FREE.

Listed by Underwriters' Laboratories, Inc. Stocked by leading electrical wholesalers everywhere.

NATIONAL ELECTRIC PRODUCTS CORP.
140 Stanwix Street, Gateway Center, Pittsburgh 22, Pa.

Please send me your free booklet on the new Xduct Conduits.

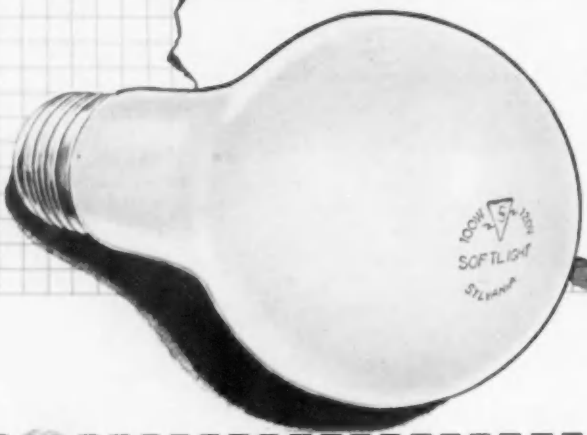
Name _____

Title _____

Company _____

Address _____

New Sylvania increase sales



Sylvania gives you this powerful Softlight Sales support

Free floor merchandiser with No. 124 assortment

Free Softlight displays for fast-moving sales . . . with your order!

		Suggested Retail Price
120	75-watt	29¢ ea.
120	100-watt	29¢ ea.
60	150-watt	32¢ ea.
12	3-way 50/150-watt	69¢ ea.
12	3-way 100/300-watt	89¢ ea.
324	Total Retail	$102.21
	You Pay	76.55
	(Based on Minimum 30% disc.)	
	Your Minimum Softlight Profit*	$30.66

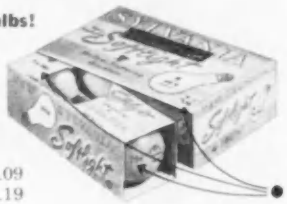
Free Counter Display with No. 88 Assortment

		Suggested Retail Price
28	75-watt	29¢ ea.
48	100-watt	29¢ ea.
8	150-watt	32¢ ea.
2	3-way 50/150-watt	69¢ ea.
2	3-way 100/300-watt	89¢ ea.
88	Total Retail	$26.25
	You Pay	18.38
	(Based on Minimum 30% disc.)	
	Your Minimum Softlight Profit*	$7.87

*Based on suggested list

Pre-pricemarked Softlight bulbs!

Every bulb, sleeve, and 4-pack is available pre-price-marked to save you time.



Special Introductory Prices!

75-watt or 100-watt 4 for $1.09
150-watt 4 for $1.19

Special 4-lamp packs give you multiple-unit volume.

Full color Sunday newspaper and network TV advertising!

- Dramatic TV commercials from coast to coast on "Beat The Clock."
- A solid three-month program of full-color local-level Softlight ads in your most important Sunday newspaper!

Complete display and promotion program!

Ad mats, and colorful display material—everything you want to get fast Softlight sales action is available with your Softlight order.

Softlight bulbs as much as 147%...

set new sale and profit records in store after store in West Coast introduction

Softlight is premium-priced for premium profit

Softlight gives you extra profit—up to 52% more profit per bulb—based on suggested list. And your customers will gladly pay more for Softlight because it's actually worth more . . . and is backed by a sales-building Money-Back offer!

Softlight is a new concept in home lighting

Softlight is more than a bulb. It's a new way to light homes . . . actually decorates as it illuminates. Its warm pearl-pink, glare-free effect makes homes lovelier—makes people more attractive—brings out colors and kills harsh shadows.

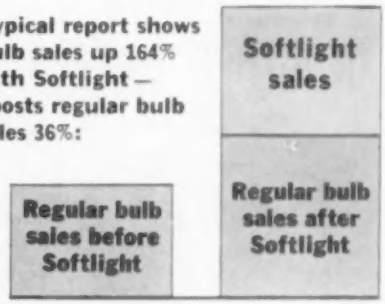
Softlight now available for prompt delivery

Be among the thousands of Softlight retailers who will boost bulb sales and profits. Check the planned-for-profit Softlight program. Get all the facts about Softlight—the exclusive Sylvania bulb that will give you the brightest sales prospects in history.

Call your Sylvania Softlight Supplier today!

Softlight gives you extra-profit volume on top of regular bulb business!

Typical report shows bulb sales up 164% with Softlight—boosts regular bulb sales 36%:



*Store name on request

SYLVANIA ELECTRIC PRODUCTS INC., Lighting Division
60 Boston Street, Salem, Massachusetts
In Canada: Sylvania Electric (Canada) Ltd.
University Tower Building, Montreal

SYLVANIA®

...fastest growing name in sight

LIGHTING . RADIO . ELECTRONICS . TELEVISION . ATOMIC ENERGY

NEW BULLDOG *Electrostrip*

PATENTED

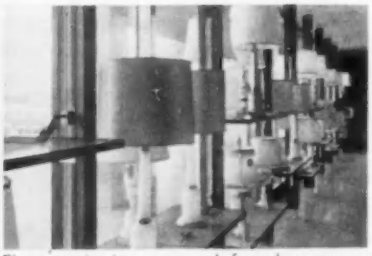
PROVIDES MOVABLE ELECTRICAL OUTLETS . . .

At last! Here's an electrical product that keeps pace with changing needs . . . one that provides outlets that can be moved in seconds—placed and spaced exactly where they are needed, as they are needed. It's BullDog Electrostrip® and it's as perfect for modernization as it is ideal for new construction. The strip is neat, attractive . . . *completely safe.* Listed by Underwriters' Laboratories. Rated at 20 amps., 125 volts, A.C.

IN HOMES, HOTELS, OFFICES, STORES, INSTITUTIONS!

Receptacle plugs twist into Electrostrip at any spot along its length—make it every *inch an outlet.* The strip's ivory color blends perfectly with any color scheme. Individually fused plugs are also available.

Electrostrip mounts on walls, partitions, baseboards, anywhere . . . bends around obstructions and corners. Outlets can be easily moved as furniture or office layouts demand. No dangerous extension cords.



Electrostrip is a natural for showrooms and shops. Displays can be changed and arranged to best advantage for outlets are always handy . . . always where needed. To add another outlet, add another plug.

Electrostrip is sold only by BullDog distributors, only to electrical contractors. See your BullDog field engineer, or write BullDog Electric Products Co., Detroit 32, Mich. Free promotion material available.

IF IT'S NEW . . . IF IT'S DIFFERENT

. . . IF IT'S BETTER . . . IT'S

© BEPCO

BULLDOG

ELECTRIC PRODUCTS COMPANY

A Division of I-T-E Circuit Breaker Company

Export Division: 13 East 40th Street, New York 16, New York. *In Canada:* BullDog Electric Products Company (Canada), Ltd., 80 Clayson Road, Toronto 15, Ontario.

Last Half Looks Good For Most

- **Industry review and preview briefly examines the outlook for 24 individual industries.**
- **Electrical machinery may run 5 per cent higher; appliance sales, output, to remain high.**

NEW YORK, N. Y.—It appears that the boom in business has now reached the "happiness phase", according to the McGraw-Hill department of economics. This is the phase in which business men are happy about sales, because they are increasing, and about costs, because they have not as yet increased very much.

However, there is a strong suspicion, the economics department reports, that before 1955 is over, business will have entered the "worriness" phase, in which executives complain increasingly about rising costs.

The McGraw-Hill economics department has come up with a series of 24 vignettes of individual industry outlooks for the months ahead. Here is how they see it:

Electrical machinery manufacturers are looking forward to a higher level of business in the last six months. Production increased only slightly over the first half of 1954. Whereas the output trend was down in 1954, it is now heading up. So it appears that for the year, as a whole, output in this industry will run 5 per cent higher than in 1954.

Electric appliances production was 20 per cent higher in the first six months of 1955, than it was in the like period of 1954. Driers and ranges are setting the pace this year. Retail sales of appliances have held up very well despite the competition from the auto industry for the consumer dollar. By the year's end it is likely appliance sales and output will still continue at relatively high levels despite possible price increases.

Television and radio output has held at extremely high levels. However TV output schedules are being cut, more than seasonally, because of inventory build-up. It now appears that output of at least 1 million color TV sets is another two years away.

Steel ingots and castings output ran about 92 per cent of capacity for the first half of 1955. For the remainder of the year the output is expected to be somewhat lower, mainly because of the falling off in demand from the auto industry. This adds up to an output of about 25 per cent increase over a year ago.

Nonferrous metals—copper, zinc, aluminum—output is running more than 25 per cent higher than last year. Prices are in the range of steady-to-rising bracket. Production in the end will probably average about 20 per cent above 1954.

Rubber products output increased from January through June, 20 per cent over 1954's like period. Most of the gain is in the original equipment market for autos. This is tied in with the gain in the new cars and trucks produced in the first half. The demand for original equipment will go down as auto production slows up. Replacement, though, is getting a good lift from tubeless tires. Output and sales will increase, but not nearly enough to prevent some decline in the rubber industry by the end of the year.

Lumber and lumber products output is running about 12 per cent ahead of 1955. Millwork and plywood output have increased substantially. Gains here are tied to the building boom.

Construction materials output is at an all time high. Of all the major types of construction, only industrial and farm construction are off so far this year. The outlook for the remainder of the year for construction—and thus for materials which supply this industry—is excellent. Housing starts will probably hold during the balance of the year at current rates. Commercial construction is expected to do even better. Industrial construction has reached its low experts think, and is now on the way to recovery.

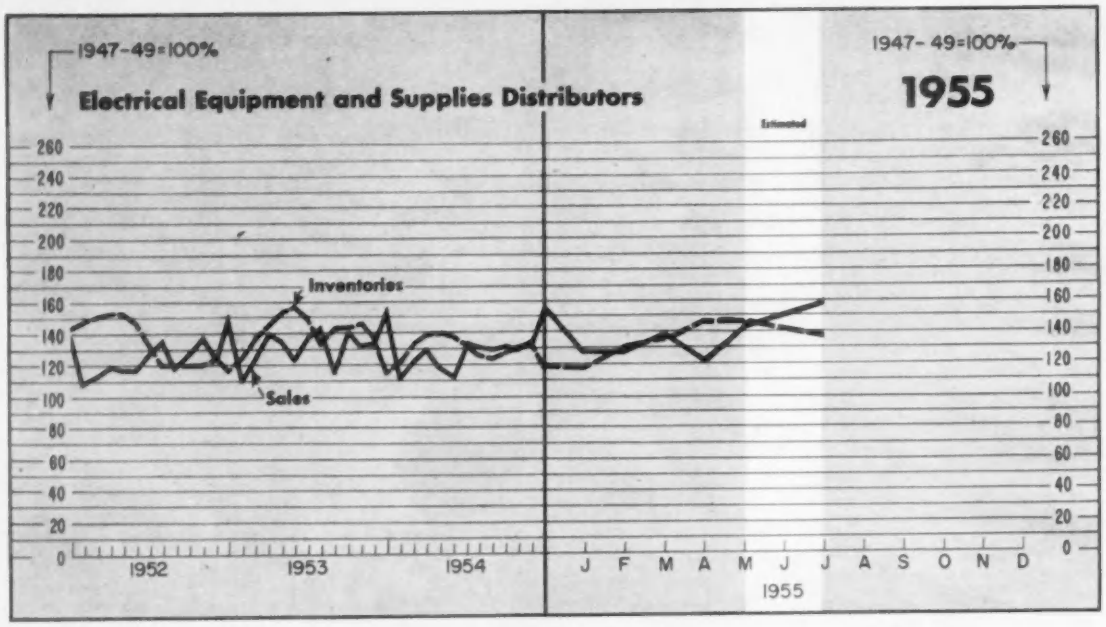
Furniture production was 7 per cent higher than in the same period last year. Retail sales are also up 7 per cent. Household furniture has made a better gain than office furniture so far in 1955. Output of household furniture is up 11 per cent, while office furniture production shows virtually no change. The outlook, due to the housing boom and the large number of new office buildings, looks very good for the furniture industry.

Textiles production is at the highest rate since early in 1953, being about 12 per cent ahead of the first

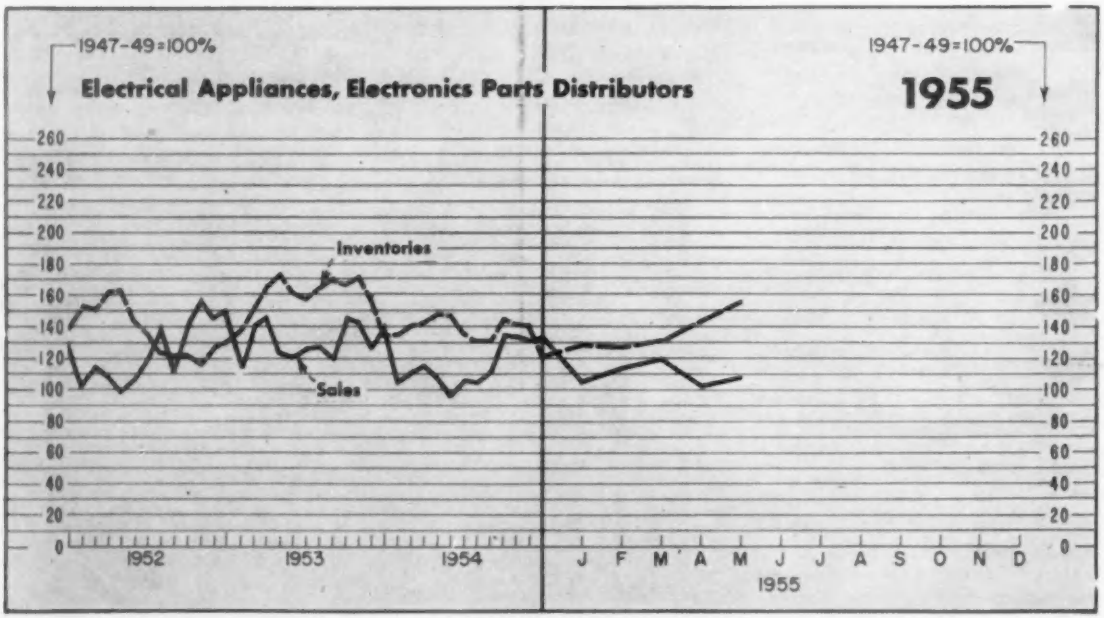
Continued on page 80

B. M. TOWER CO. recently opened its new headquarters at State Street Ext. in Bridgeport, Conn. In the three decades the firm has been active it has expanded from 1 employee to 31 and from 2,500 sq. ft. to 45,000 sq. ft. of floor space. It does more business now—in one day—than it did in an entire year in the early days. Pictured in the usual order are: O. A. Kirkland, G.E. New York district manager, construction materials div.; Harvey Tower, vice president; B. M. Tower, president; J. J. Lengyel, manager of G. E.'s construction materials sales dept.; and Ben Feld, secretary of the electrical wholesaling firm.

Business Index: NATIONAL PICTURE



	INDEX					% CHANGE
	May 1955	*Apr. 1955*	*May 1954*	*May 1953*	*May 1952*	*1955 from 1954*
Sales	142	122	114	125	118	+9
Inventories ..	144	146	139	158	148	—



	INDEX					% CHANGE
	May 1955	*Apr. 1955*	*May 1954*	*May 1953*	*May 1952*	*1955 from 1954*
Sales	107	104	98	121	107	+7
Inventories ..	154	142	148	162	144	—

SOURCE: Bureau of the Census. June-July projection is by this publication. Per cent change in sales is five months of 1955 from five months of 1954.

help your customers save money with

efcor's new "swing top" entrance cap

Show them the new down-to-earth way of saving time and trouble in service entrance installations. Efcor's new "Swing Top" entrance cap has no loose parts, no hood to remove . . . just loosen one screw and swing the hood open. The patented one-piece, hinged construction holds the hood aside while cables are drawn through the head! Previously, it has been necessary to loosen several screws, remove the cover, put it in the pocket or on the ladder . . . where it might fall to the ground. Now . . . with "Swing Top" . . . the entire installation takes just a third of the time! Also demonstrate how the rugged clamp permits quick assembly directly against the wall. No offsetting or threading of conduit is required . . . accommodates EMT, as well. Swing Top's longer radius makes wire handling easier too. Make the swing through your area with "Swing Top" now . . . for new . . . profitable sales.

Write for free sample or see your Efcor Representative.

Efcor Reg. Trade Mark

electrical fittings corporation

37-50 57th STREET • WOODSIDE 77, NEW YORK

Business Index: REGIONAL ANALYSIS

ELECTRICAL GOODS WHOLESALERS

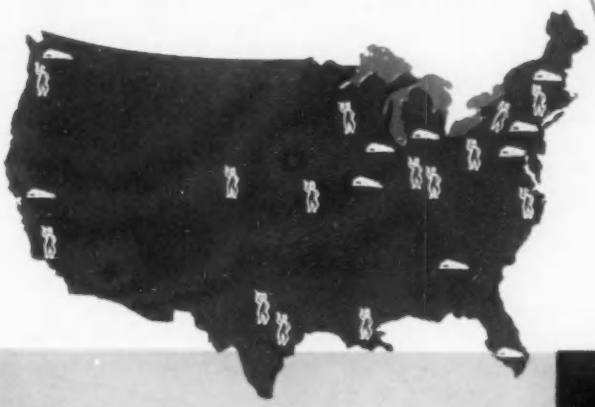
May 1955

	SALES % CHANGE			INVENTORIES % CHANGE	
	From Apr. 1955	*From May 1954*	*1955 From 1954**	*From Apr. 1954*	*From May 1954*
NEW ENGLAND					
Electrical equipment and supplies distributors	+24	+36	+1	0	−5
Electrical appliances, electronic parts distributors	−9	+10	0	+1	+6
MIDDLE ATLANTIC					
Electrical equipment and supplies distributors	+8	+3	+1	+2	−1
Electrical appliances, electronic parts distributors	+1	+2	+4	+6	+10
EAST NORTH CENTRAL					
Electrical equipment and supplies distributors	+26	+36	+3	−4	−2
Electrical appliances, electronic parts distributors	−4	+20	+7	+6	+24
WEST NORTH CENTRAL					
Electrical equipment and supplies distributors	+1	+23	+8	+6	+11
Electrical appliances, electronic parts distributors	+12	+34	+7	+7	+8
SOUTH ATLANTIC					
Electrical equipment and supplies distributors	+5	+16	+13	−2	+6
Electrical appliances, electronic parts distributors	−5	+20	+10	+5	+15
EAST SOUTH CENTRAL					
Electrical equipment and supplies distributors	+20	+30	+19	−6	+13
Electrical appliances, electronic parts distributors	−6	+35	+13	....	....
WEST SOUTH CENTRAL					
Electrical equipment and supplies distributors	0	+25	+22	+2	+15
Electrical appliances, electronic parts distributors	0	+10	+8	+12	+23
MOUNTAIN					
Electrical equipment and supplies distributors	0	+33	+11	−7	+4
Electrical appliances, electronic parts distributors	n.a.	n.a.	n.a.	n.a.	n.a.
PACIFIC					
Electrical equipment and supplies distributors	+6	+28	+21	−4	+7
Electrical appliances, electronic parts distributors	+7	+37	+15	+8	+19

*5 months 1955 from 5 months 1954

Source: Bureau of the Census

you can count on Conduit of COLUMBUS



for speedy deliveries from conveniently located warehouses.

Your Conduit Representative can give you all the facts

* ATLANTA, GA.
George R. Kocin & Co.
144 Walker St., S. W.

* BOSTON, MASS.
Jack Fay, Inc.
933 East 2nd St.

* CHICAGO, ILL.
Kurtz & Co.
30 S. Jefferson St.

CINCINNATI, O.
Albert Block Co.
2820 May St.

DALLAS, TEXAS
Walter J. Huemmer
Dallas Transfer & Terminal Whse. Bldg.

DENVER, COLO.
Slaybaugh—Thompson Co.
100 W. 13th Ave.

* DETROIT, MICH.
Block Brothers
81 Brady St.

HOUSTON, TEXAS
Walter J. Huemmer
c/o Ed B. Thornton
2829 Sunset Blvd.

INDIANAPOLIS, IND.
Block Brothers
c/o Jerome Krienik
4740 Hinsley Ave.

KANSAS CITY, KANS.
Wood & Anderson
c/o George R. Mitchell

LOS ANGELES, CALIF.
J. J. Schaller
845 Traction Ave.

* MIAMI, FLORIDA
Jules J. Dreyfuss & Son
1361 N. W. 23rd St.

MINNEAPOLIS, MINN.
Daniel R. Schwab Co.
6800 West Lake St.

NEW ORLEANS, LA.
Paul Hogan, Jr.
342 International Trade Mart

* NEW YORK, N. Y.
Thea & Schoen, Inc.
46 Murray St.

* PHILADELPHIA, PENNA.
Wm. B. Bleiman & Son
252 N. Third St.

PITTSBURGH, PENNA.
Charles R. Norrish Co.
2900 Smallman St.

PORTLAND, OREGON
Northwestern Agencies, Inc.
c/o Marshall B. James
2941 N. W. Quimby

RICHMOND, VA.
Wm. B. Bleiman & Son
c/o Leon Hoffman
3414 W. Franklin St.

* ST. LOUIS, MO.
Wood & Anderson
3001 Delmar Blvd

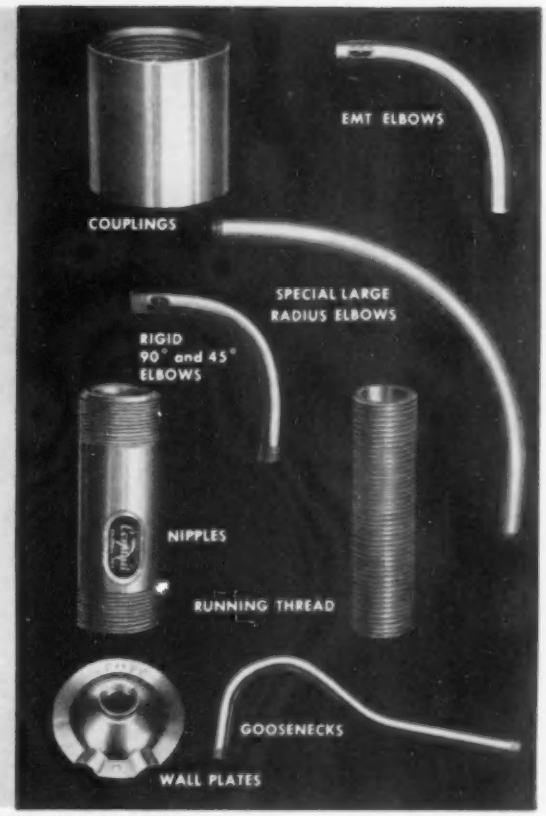
* SAN FRANCISCO, CALIF.
Eckert—Lloyd Co.
1225 Sixth St.

* SEATTLE, WASH.
Northwestern Agencies, Inc.
4130 First Ave., South

SOUTHINGTON, CONN.
Jack Fay, Inc.
c/o Weston Mac Roe
Hart Acre Road

SYRACUSE, N. Y.
Fay—Sullivan, Inc.
259 Kensington Place

* Warehouses



SOLD ONLY THROUGH RECOGNIZED WHOLESALERS

Look for this label when you buy fittings

Conduit of COLUMBUS

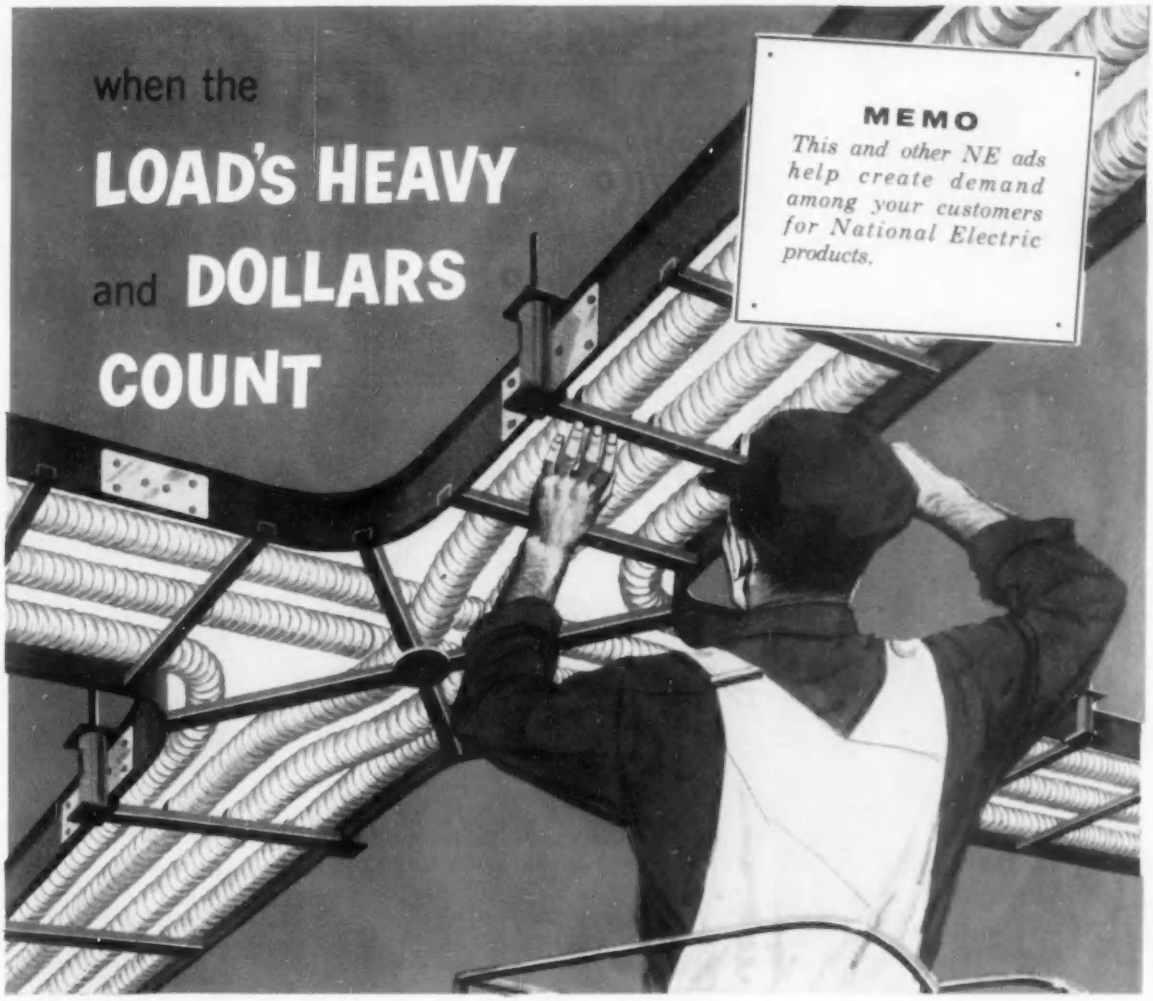
CONDUIT PIPE PRODUCTS CO., COLUMBUS, OHIO

PIPE COUPLINGS • PIPE NIPPLES • ELBOWS, RIGID & E.M.T.
RUNNING THREAD • GOOSENECKS • WALL PLATES

Wholesale Price Index for 62 Electrical Products

Product (1947-49=100)	*June 1955*	*May 1955*	*June 1954*
Copper Wire, bare. Unit: pound	155.3	155.3	132.8
Building Wire, type R. Unit: M feet	155.3	155.3	82.9
Non-metallic Sheathed Cable. Unit: M feet	81.7	97.8	70.1
Varnished Cambric Cable. Unit: M feet	152.0	150.7	145.4
Flexible Cord, type SJ. Unit: M feet	115.4	115.4	113.4
Lighting Panelboard, fuse type. Unit: each	115.4	115.4	115.4
Lighting Panelboard, circuit breaker type. Unit: each	122.4	122.4	122.4
Safety Switch, 2 Pole, type A, 250 volts. Unit: each	145.7	145.7	145.7
Safety Switch, 3 Pole, type C, 575 volts. Unit: each	140.2	140.2	140.2
Air circuit breaker, 250 volts. Unit: each	142.3	142.3	142.3
Power Panel, fuse type, 250 volts. Unit: each	120.3	120.3	122.0
Power Panel, circuit breaker type. Unit: each	127.5	127.5	126.8
Motor Control, a.c., 25-30 hp., 400-440 volts, combination starting switch. Unit: each	145.6	145.6	145.6
Motor Control, a.c., 25-30 hp., 220 volts. Unit: each	137.4	137.4	137.4
Motor Control, a.c., 50 hp., 440 volts. Unit: each	146.5	146.5	146.5
Motor Control, a.c., 75 hp., 440 volts. Unit: each	138.1	138.1	138.1
Motor Control, d.c., 10 hp., 239 volts. Unit: each	153.2	153.2	153.2
Renewable Cartridge Fuse, 250 volts. Unit: each	115.7	115.7	110.4
Non-renewable Cartridge Fuse, 600 volts. Unit: each	121.4	121.4	115.6
Plug Fuses, 125 volts, non-renewable. Unit: each	105.3	105.3	101.1
Motor, d.c., 1/6 hp., 115 volts. Unit: each	142.8	142.8	141.4
Motor, a.c., 1/4 hp., 110-115 volts. Unit: each	108.2	108.2	112.7
Motor, a.c., 1/2 hp., 220-240 volts. Unit: each	109.6	109.6	111.4
Motor, a.c., polyphase, induction, 3 hp., open sleeve bearing. Unit: each	118.8	118.8	122.7
Motor, a.c., polyphase, induction, 3 hp., ball bearing. Unit: each	124.8	124.8	129.6
Motor, a.c., polyphase, induction, 10 hp., open sleeve bearing. Unit: each	123.8	123.8	129.1
Motor, a.c., polyphase, induction, 10 hp., ball bearing. Unit: each	127.8	127.8	135.0
Motor, d.c., 5 hp. Unit: each	141.6	141.6	140.1
Fan, under 12 inches. Unit: each	113.0	113.0	110.4
Fan, propeller type, 24-30 in. wheel diameter, direct connected. Unit: each	143.3	143.3	143.6
Drill, production line, 1/4 in. Unit: each	118.4	115.6	112.0
Drill, production line, 1/2 in. Unit: each	111.5	109.5	107.0
Saw, production line, 6-8 in. Unit: each	100.6	100.6	103.7
Pliers, 6-in., long nose. Unit: each	164.1	164.1	164.1
Lamp, 60-watt, 110, 115, 120 and 125 volts. Inside-frosted. Unit: each	147.2	147.2	136.9
Distribution Transformer, 15 kva. Unit: each	130.5	130.5	130.5
Distribution Transformer, 45-50 kva. Unit: each	122.4	122.4	125.5
Dry Type Transformer, 15 kva. Unit: each	122.9	122.9	122.8
Dry Cell Battery, flashlight, type D. Unit: each	149.3	149.3	149.3
Dry Cell Battery, portable radio "B" pack 67 1/2 volts. Unit: each	123.4	123.4	115.1
Dry Cell Battery, general purpose. No. 6 type 1 1/2 volts. Unit: each	140.1	140.1	140.1
Voltmeter, portable type, 3 1/2-6 1/2 inches. 0-300 volts. Unit: each	164.8	164.8	156.3
Ammeter, portable type, 4-6 1/2 inches. Unit: each	157.5	157.5	151.3
Watt-meter, for instrument transformer, 100-150 volts. Unit: each	138.1	138.1	138.1
Toaster, automatic, "pop-up." Unit: each	105.1	107.1	108.0
Iron, under 4 pounds. Unit: each	104.6	104.6	108.7
Cooking range, standard size. Unit: each	102.2	102.2	103.6
Washing Machine, nonautomatic, wringer type. Unit: each	106.5	106.5	106.2
Washing Machine, automatic. Unit: each	100.3	100.3	102.5
Ironer, table model. Unit: each	114.3	114.3	115.5
Ironer, portable model. Unit: each	111.3	111.3	102.0
Vacuum Cleaner, upright. Unit: each	107.1	107.1	108.0
Vacuum Cleaner, tank. Unit: each	107.6	107.6	108.9
Refrigerator, capacity 7.4-9.5 cubic feet and over. Unit: each	100.8	100.8	106.4
Home Freezer Chest, 8-12.4 cubic feet. Unit: each	98.9	98.9	106.9
Water Heater, 52 gallon tank, 230 volt a.c.	104.7	104.7	107.2
Radio, table model. Unit: each	96.9	86.9	88.2
Radio, console model, radio-phonograph combination. Unit: each	97.8	97.8	97.8
Radio, portable model. Unit: each	88.3	88.3	93.0
Television, table model. Unit: each	69.1	69.2	71.3
Television, console model. Unit: each	67.9	68.3	73.0
Radio-television-phonograph combination. Unit: each	73.5	73.5	75.2

Source: Bureau of Labor Statistics

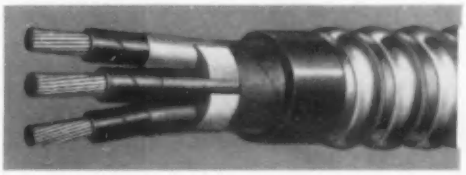


NEPCO-LOK® interlocked armor cable

National Electric Nepco-Lok, Interlocked Armored Power Cable, can provide you with the answer to low-cost, heavy-duty industrial wiring.

The outstanding flexibility of Nepco-Lok cuts installation costs because it's speedily installed around corners or projections indoors or out. In addition it is often possible to economically relocate Nepco-Lok to meet the power needs of expanding production facilities and thereby reduce the cost of future plant modernization.

Nepco-Lok is available in 600 volt and 5,000 volt constructions with three and four conductor assemblies and also in multi-conductor control cables. National Electric Nepco-Lok offers industrial heavy-duty capacity at low cost plus the added insurance against production stoppage offered by a system of individually protected cables.



Whether you're working on the modernization of old facilities or new plant construction, you'll find it profitable to get the details on National Electric Nepco-Lok Interlocked Armored Cable.

Call your National Electric representative or write National Electric Products Corporation, 2 Gateway Center, Pittsburgh 22, Pa.

National Electric Products

PITTSBURGH, PA.

3 Plants • 10 Warehouses • 36 Sales Offices

NE SPECIAL CABLES WILL MEET YOUR REQUIREMENTS FOR POWER, CONTROL AND ELECTRICAL EQUIPMENT

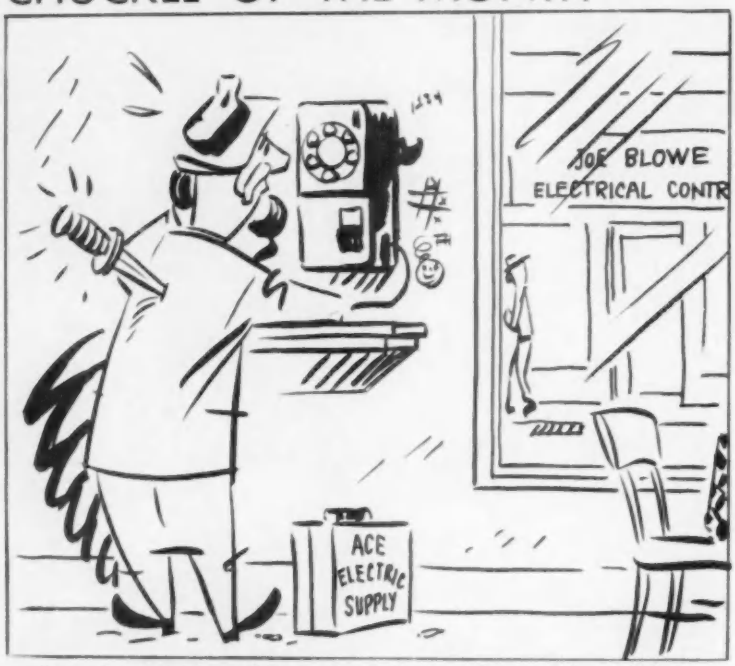
Guaranteed footage in every roll

Be sure you are giving your customers their money's worth! Recommend Chase — the complete line of top quality Plastic, Friction, Rubber and Neoprene insulating tapes. Standard and A.S.T.M. grades, packaged individually or in 10-roll dispensers. Every roll is film wrapped to assure freshness, and footage is guaranteed. For details write Chase & Sons, Inc., Randolph, Massachusetts.

CHASE

Tapes and Insulating Materials for the Electrical Industry.

CHUCKLE OF THE MONTH



"Boss, I just finished talking to the contractor and I got a funny feeling he's gonna knife us in the back on that big job."

NEWS (cont.)

synthetic fabrics all have made good showings as compared with a year ago. And textile prices are said to be no longer rising.

Apparel production increased 4 per cent over the first half of 1954. Men's wear held up better than women's wear during the first six months. Inventories are relatively low, and sales and output are in pretty good balance.

Food and beverage production inched up over the first half of 1954. Output of food was up 1 per cent, while beverage production showed no change. A substantial increase in meat production showed in the rise of food output.

The chemical industry output for the first half of 1955 was 6 per cent above the last six months of 1954, and about 10 per cent more than in the first half of 1954. During the second half of this year the trend should continue upwards. Plastic and synthetic fibers are recording big gains over a year ago.

Machine tools shipments in the first half are 6 per cent below the last six months of 1954, and as much as 40 per cent under 1954's first half. However, first half new orders have topped shipments, so backlogs are beginning to inch up. New orders for metalworking machinery are running higher now than at any time in the last 18 months.

Auto manufacturers turned out an all time record for first-half passenger car output—4.3 million cars in addition to 625,000 trucks. Auto production will slow down because of high stocks in dealers' hands and a slackening in consumer demand for the 1955 model. New models are expected to roll off the assembly lines starting as early as September.

Auto and truck parts output is up 35 per cent over last year's period. So far manufacturers are producing parts at a rate 15 per cent higher than in 1950, the previous peak year. In the last few years, the average age of trucks has not declined as in the case of passenger cars. Demand for replacement truck parts has been very heavy.

Railroad equipment production is 40 per cent below last year. Lately new orders have run ahead of shipments. This trend suggests a somewhat higher output in the latter half of 1955.

Aircraft production levelled off during the first six months. There may be some additional upswing in activity in the industry by the year's end.

Construction machinery manufacturers are having a good year. All

WIRE BY PHELPS DODGE

Huge wire mill-warehouse offers immediate delivery service on wire and cable!

Phelps Dodge Copper Products Corporation's new plant at Yonkers, N. Y., covers seven and a half acres, is equipped with the latest facilities to service its customers.

A coordinated production and warehousing system in this plant enables Phelps Dodge to maintain stocks of every kind of building wire and cable ready for immediate filling of customer orders. Ten truck bays and a seven-car undercover freight siding will eliminate the usual loading delays, help speed shipments to their destinations. This new and exclusive system is an example of the careful attention Phelps Dodge has given to providing the finest service for its customers at this new plant.

On every wiring job, large or small, where top quality materials, expert workmanship and experienced "know-how" are called for, *it pays to rely on Phelps Dodge and your Phelps Dodge* distributor!

PHELPS DODGE COPPER PRODUCTS CORPORATION

SALES OFFICES: Atlanta, Birmingham, Ala., Boston, Buffalo, Charlotte, Chicago, Cincinnati, Cleveland, Dallas, Detroit, Fort Wayne, Greensboro, N. C., Houston, Jacksonville, Kansas City, Mo., Los Angeles, Milwaukee, Minneapolis, New Orleans, New York, Philadelphia, Pittsburgh, Portland, Ore., Richmond, Roanoke, Rochester, N. Y., San Francisco, St. Louis, Seattle, Washington, D. C.

six months of 1954. Wool, cotton, and types of road and excavating machinery are recording gains over a year ago. Shipments, on the average, are running about 10 per cent ahead of 1954.

Farm machinery output and sales turned upward in 1955. Farm tractor shipments are nearly 15 per cent higher than in the corresponding period for 1954. Output during 1954's last six months was low, so on a year-to-year basis, farm equipment output may average 20 per cent higher in 1955. Sales may run 10 per cent higher with the rest going into inventories. This is expected to occur despite the fact that total farm income is expected to be down 5 per cent this year.

Office machinery manufacturers believe this year may turn out to be the best on the record books. They have booked about 12 per cent more new orders in the first half of 1955 than in the corresponding 1954 period.

Instruments and control new orders have run a little ahead of a year ago. The big growth has been in data processing equipment and nuclear radiation type control devices.

Petroleum refining operations were 6 per cent higher in 1955's first half. Consumption is somewhat higher than output and stocks have declined. What with the increased use of petroleum products for all sorts of uses—gas and oil for autos and trucks, oil for heating homes, industrial fuel oils—the industry is expecting 1955 to be its best year.

Paper and allied products production was up 11 per cent over the first half of 1954. The biggest increase has been in building paper and board because of the boom in residential and commercial construction. During the balance of the year paper production is expected to level off at current high levels.

Tuttle New President Of Crouse-Hinds

SYRACUSE, N. Y.—John R. Tuttle is the new president and chairman of the board of the Crouse-Hinds Co. He assumed the positions on July 26. Mr. Tuttle was formerly vice president and treasurer.

Three other executives have retired from active management. They are: William L. Hinds, chairman of the board; Albert F. Hills, president; and W. C. Blanding, executive vice president.

Mr. Tuttle was appointed controller for Crouse-Hinds in 1933. In 1943 he became company secretary.

Slipping Profit Margin

It is far more dangerous than lack of sales—analyze before it is too late, says one wholesaler.

The same thing that happened in the appliance field is happening to the supply and lighting business.

AT a recent meeting of the Eastern Electrical Wholesalers Association, the question of how far a manufacturer or representative should go in selling his product in behalf of a distributor produced quite a discussion.

The following remarks by George Weintraub, secretary of the Central Queens Electric Supply Co., Jamaica, L. I., are so pertinent that we are quoting some of them for our readers.

"I attended the N.A.E.D. Convention in Chicago last month. I heard one speaker state that this industry is going through a 'profitless prosperity.'

"A very appropriate phrase. Never before have so many goods been sold through electrical distributors. Yet they see nothing better than breaking even —that is if things go well.

"Such a situation is by far more dangerous than would be the lack of sales. With so much business being done at extremely low gross margins, we are too busy to take time out to analyze where we are going, until it is too late.

"If, however, our gross profit were reduced because of lack of business, we would readily feel it and could at least retrench on unwarranted overhead.

"We have all observed what has happened to the appliance field. To operate as a distributor there is fast becoming a sure way to lose money.

"I am certain that you have heard many supply distributors say that they were glad that they were not in the appliance business. To them I say, 'Beware!' The same that has happened in the appliance field is happening to the supply and lighting business.

"As a matter of fact, the fallacious terms, 'plus business,' and 'plus profit,' which have been two of the main causes for the deterioration of the appliance field, are now being accepted as good economics by many of our distributors.

"These terms are being used by some manufacturer's representatives when trying to peddle to distributors an order they had taken at a few percent gross.

"But we do not have the opportunity of creating consumer sales for our products. In the appliance field, the cutting of prices, the giving away of profits by both the distributor and dealer, does—at least temporarily—create consumer demand which might not have been there at regular prices.

"However, we in the supply and fixture business do not sell consumer gift goods. Our volume is predetermined by the needs of the construction industry.

"Regardless of how low we sell our goods, no greater volume of goods can be sold than what is needed . . .

"As a matter of fact, the moment a sale is made at no profit, the amount of goods sold on that job immediately reduces the possible market by that volume.

"Many of our supply distributors who maintain elaborate and costly lighting fixture showrooms are already feeling the ever spreading discount disease. Some of the well known discount houses are featuring lighting fixtures at prices which indicate that they are either buying direct or paying a distributor a margin which cannot be profitable.

"I realize full well that many of us distributors are guilty of profitless selling. However, most of us, if we have not already learned our lesson, will sooner or later learn that you cannot remain in business without profits.

"Even if we all realize that we cannot continue to exist without greater gross margins, we will not be able to overcome the evil unless we are masters of our own destiny, unless we know that the manufacturer and the manufacturer's representative will not undermine us by disclosing our costs; and, also sell goods to our customers and then pit us—one against the other—to accept this so called, 'plus business' at practically no profit.

"I believe it is a factory's prerogative not to have a distributor

Continued on page 85

CRESCENT
is the Service Entrance Cable for Modern Electrical Living with . . . Crescent Type RH Insulation
CRESCENT TYPE SE-STYLE U/75°C
Crescent has used Type RH insulation on Service Entrance Cables since 1946. This allows from 12 to 18% greater current carrying capacity when compared to service entrance cables with ordinary Type R insulation.
Crescent Service Entrance Cables are so constructed that they are highly flexible and easily bent to conform to building surfaces.
You get better value, greater carrying capacity, easy working, and longer life when you specify Crescent Service Entrance Cables.
CRESCENT
OVER 70 YEARS EXPERIENCE
INSULATED WIRE & CABLE CO.
TRENTON, NEW JERSEY

Those who really know say:

CERTIFIED CBM CERTIFIED by ETL BALLASTS

give best results!

● No one knows better the value of CERTIFIED CBM BALLASTS than the manufacturers of fluorescent tubes. For the satisfactory performance of their lamps is vitally dependent on the ballasts that operate them. They know CERTIFIED CBM BALLASTS are Tailored to the Tube.

CHAMPION *says:*

"Fluorescent lamps are designed to operate at specific electrical values. The use of auxiliary equipment that has been proven to meet these agreed upon standards will assure the user maximum value for his lighting dollar with a minimum of operational failures. Certified Ballasts are inexpensive insurance."

GENERAL ELECTRIC *says:*

"The life and light output ratings of fluorescent lamps are based on their use with ballasts providing proper operating characteristics. Ballasts that do not provide proper electrical values may substantially reduce either lamp life or light output, or both. Ballasts certified as built to the specifications adopted by the Certified Ballast Manufacturers (CBM) do provide values that meet or exceed minimum requirements. This certification assures the lamp user, without individual testing, that lamps will operate at values close to their ratings."

SYLVANIA *says:*

"The light and life ratings of fluorescent lamps are based on three hour burning cycles under specified conditions and with ballasts meeting American Standards Association specifications. Ballasts marked with the CBM emblem and certified by Electrical Testing Laboratories, Inc., meet ASA specifications."

WESTINGHOUSE *says:*

"Use ballasts that are tested and Certified by Electrical Testing Laboratories or ones that are otherwise known to meet the specifications of the lamp manufacturer. These will give best results with Westinghouse fluorescent lamps."

That's why CERTIFIED CBM BALLASTS merit the slogan—Tailored to the Tube.

Certified CBM Ballasts are built to assure quiet operation and long trouble-free life.

CERTIFIED BALLAST MANUFACTURERS

Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO

Continued from page 82

policy, and to sell direct to the contractor. However, I do not believe that the distributor should lend respectability to the manufacturer who actually sells direct, but does the billing through a willing distributor at what is a losing margin of profit.

"Actually, I do not think this is a distributor policy. The manufacturer is *graciously* permitting the distributor to assume the cost of servicing the customer, as well as financing the sale — for a percentage which a bank might not even consider acceptable for a straight loan, even with endorsements.

"These views I have expressed are my own. I hope they will serve as a basis for discussion."

Western Supply Purchased By New Corporation

SALT LAKE CITY, UTAH—The Western Supply Co. has been sold to a newly-formed corporation, it has been revealed by Henry W. Eskuche, president.

The new owner is Western Supply Co., Inc., headed by George L. Richards. Associated with Mr. Richards are J. L. Firmage, who will be vice president and treasurer, J. H. Firmage, Le Grand Richards, Mrs. Edna C. Firmage and Mrs. Edna Richards.

Purchase price of the property was not disclosed. The firm was founded 37 years ago. Mr. Eskuche was one of the original three founders. The territory served includes Utah and parts of Idaho, Nevada, Oregon and Wyoming. Operations will continue at 357 West Second South Street.

J. TAYLOR FRAZIER is the new president of the Bluefield Supply Co., Bluefield, W. Va. Mr. Frazier succeeds Lon M. Rish, who is now Bluefield's chairman of the board. The company serves southern West Virginia and sections of eastern Kentucky, eastern Tennessee and western North Carolina. The firm was founded in 1921.

HUBBELL
REG. U.S. PAT. OFF.

PRESSURE PLATE

BACK WIRING

FOR GREATER WIRING SECURITY, SAFETY AND CONVENIENCE

Diagram at right shows how the Hubbell pressure plate mechanism is designed. The stripped wire, when inserted through the reinforced back wiring holes (left), locates between the two terminal plates which, as the screw is tightened, pressure-grip the wire securely (picture below).

the convenience of modern back wiring *plus* the **safety** of a pressure plate screw connection

Save-A-Splice . . .

Another important advantage of Hubbell pressure plate back wiring is the fact that a circuit may be extended using both back and side wiring. The same binding screw anchors both the wire inserted through the hole in back and the side-looped wire.

Twist-Lock **No. 7582**

Highest Grade HEAVY DUTY WIRING HUBBELL DEVICES

23HH55A

HARVEY HUBBELL, INC. DEPT. D BRIDGEPORT, CONN.

FACTORY WAREHOUSE LOCATIONS ASSURE NATIONWIDE STOCK AVAILABILITY

State and Bostwick Sts. Bridgeport 2, Conn. | 37 South Sangamon St. Chicago 7, Ill. | 103 North Santa Fe Ave. Los Angeles 13, Calif. | 542 Natoma St. San Francisco, Calif. | 1111 Dragon St. Dallas 7, Texas

GUARDIAN *delivery service*

through your supply house

BULK SUPPLIES...FAST! Don't risk waiting at the site for supplies. Work through an authorized General Cable distributor...his substantial stocks of GUARDIAN building wire are backed by bulk supplies—in a wide selection of sizes—at a nearby General Cable distribution center.

The General Cable Distribution Network—largest in the industry by far—is there to help your General Cable supplier give you fast, convenient delivery.

This fast service plus consistent high uniform quality makes it pay you to always specify "General Cable" for all your electrical wire and cable needs.

GENERAL CABLE
CORPORATION

NOW...DISTRIBUTION FACILITIES COAST-TO-COAST. FASTEST SERVICE IN THE INDUSTRY.

Ingraham, Callahan Retire From Times Appliance

NEW YORK, N.Y.—E. B. Ingraham, president, and A. F. Callahan, vice president of the Times Appliance Co., Inc., retired last month from active service with the electrical wholesaling firm. Times Appliance became a wholly-owned subsidiary of the Westinghouse Electric Corp., last February.

E. B. Ingraham

A. F. Callahan

Victor D. Kniss, an official of the Westinghouse Electric Corp., is the new president of the Times Appliance Co.

Mr. Ingraham, who founded the firm in 1919, has spent his entire business career in the electrical wholesaling business. He served as president of the NAED in 1947 and 1948.

Mr. Callahan, a graduate civil engineer, joined the Times Appliance Co. in 1940. During World War II, he served as chief of staff for the North Atlantic division of the Air Transport Command.

Certified Lighting Adds Two Bureaus

NEW YORK, N.Y. — With the decisions of the Electrical Association of Detroit and of the Fort Worth Electric Club to inaugurate Certified Lighting Programs in their respective areas, the industrial and commercial program now extends from coast to coast and from border-to-border.

Nine local bureaus are now in operation, or being formed, from Massachusetts to California and from Michigan to Texas.

Presently in operation are bureaus covering: Rhode Island, centered at Providence; eastern Massachusetts, centered at Boston; Indianapolis; northern California, centered at San Francisco; and San Diego County, California.

Scheduled to commence operations in the fall are bureaus centered at Charlotte, N.C., Cincinnati, Ohio, Detroit and Fort Worth. Each will cover extensive surrounding areas, according to the National Lighting Bureau.

THE GREATEST NAME IN ELECTRICAL WIRE AND CABLE

General Cable GUARDIAN Building wires represent the highest type of product available under any of the Code classifications. Every step during manufacture is quality controlled, with all the responsibility of General Cable behind it.

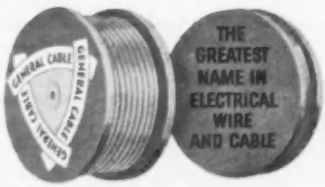
GUARDIAN wires are available in many types: Braided Types R, RH-RW and RHW; Thermoplastic Type TW; Lead Covered Types RL and RHL; Neoprene Jacketed Types RH-RW and RHW.

Braid covered wires are hard finished, slick and smooth—easy to pull without any need for lubricant . . . standard color coding, of course. Type TW is similarly easy to handle and its minimum diameter will add circuits where conduit space is limited.

All types of GUARDIAN are easy to strip clean for joining, and in all ways help to keep the job moving. When you order your Building Wire, say "General Cable GUARDIAN" to your electrical supply house — and be sure of a good job, profitably handled.

Remember, too, General Cable makes all types and sizes of SERVICE ENTRANCE cable . . . in fact, they are the *only* manufacturer who can supply *every* type of wire you need!

GENERAL CABLE
CORPORATION



BARE, WEATHERPROOF, INSULATED WIRES and CABLES FOR EVERY ELECTRICAL PURPOSE

GENERAL CABLE CORPORATION
Executive Offices: 420 Lexington Ave., New York 17, N. Y.

SALES OFFICES: Atlanta • Baltimore • Boston • Buffalo Chicago • Cincinnati • Cleveland • Dallas • Denver • Detroit Erie (Pa.) • Greensboro (N. C.) • Houston • Indianapolis Kansas City • Lincoln (Neb.) • Los Angeles • Memphis Milwaukee • Minneapolis • New Haven • Newark (N. J.) New York • Philadelphia • Pittsburgh • Portland (Ore.) Richmond (Va.) • Rochester (N. Y.) • Rome (N. Y.) St. Louis • San Francisco • Seattle • Springfield (Ill.) Syracuse • Tampa • Tulsa • Washington, D. C.

Flag down one source . . .

Breaking In A New Territory

Continued from page 39

Doesn't talk price unless really pressed.

tors whom he knows are home for their noon meal.

"They go home for lunch religiously . . . they've done it for years," he says.

When and if Joe misses his customers, he takes out after them. But not before first stopping to chat with the lady of the house or to drop off a bit of candy he promised some child. He inquires and is sincerely interested in his customer's problems. He makes notes of birthdays, weddings, anniversaries and knows who is sick, who is well and how the dog is.

Joe delivers the order to the contractor's back door, workshop or out to the job. If the contractor is not around, he drops off the order and goes looking for him. In one week he made four round-trips for one contractor!

If he has the time while driving through the countryside, Joe does missionary work among the backwoods contractors. When he sees signs along the road that a new supermarket or gas station is being erected, he pulls up, asks questions and takes notes, for he'll pass that way again.

Noticing an electrician's truck parked outside a tavern, Joe stops and goes in, says hello, asks what's new, is anything needed.

"No liquoring them up though, I just have a cup of coffee," he says emphatically. "Then I'm off."

During one sudden, summer rainstorm Joe came across a competitor's truck making a delivery—and having a hard time of it. So he stopped and helped him. A friendly gesture and besides, it created good will.

When time is really pressing, his customers are still sure of their order. As Joe points out, "See that gas station. I've got a buddy who owns it. He lets me drop off my parcels when I'm in a hurry. The contractor up the road knows this. But I make sure I call on him the next trip."

• **Look Like Them**—Dress, too, has a lot to do with selling. In the winter, shoes and socks must be changed often, perhaps twice a day, because of the mud or snow on some construction site. In the summer he carries a fresh shirt and undershirt for the afternoons.

Joe warily remarks, "But with some fellows you have to go in the job looking fatigued or else they won't do business with you. You have to look like them!"

Al Baron stresses that South Bay salesmen do not know the current low price of day-in-and-day-out items. This removes the danger of a salesman becoming too price-minded, which would eventually undo the service angle, he says.

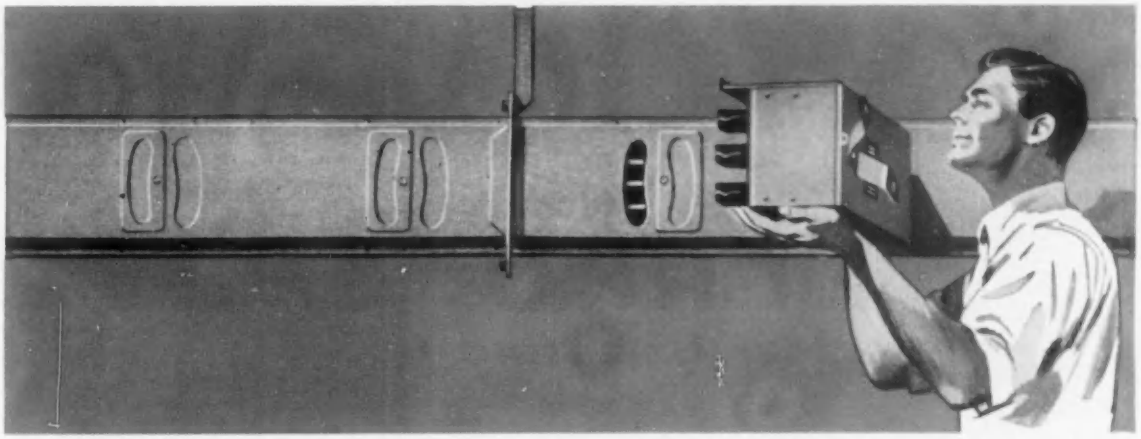
Joe Ball does not talk price unless really pressed and that's usually only on a few big jobs. "Some fellows will take only the best anyway and will take no other. If I don't have it, I'll get it for them. Some contractors in housing developments have to use cheap stuff on what the builder allows them. Sure, they would prefer to use better switches, but they'll put in cheap ones. They've got to make a living."

• **Will Quote**—If the customer is insistent on some large order of bread-and-butter equipment, Joe will telephone Al Baron in Patchogue and then will quote price. He also carries a carton full of catalogs in the station wagon to check on items of a special nature.

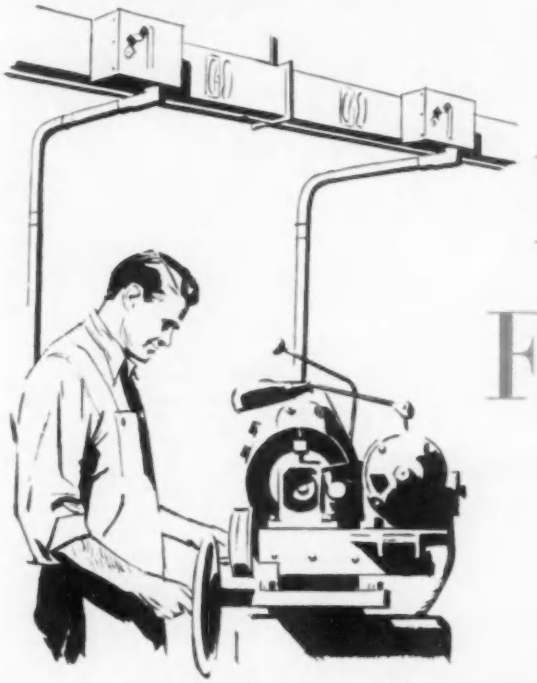
Doing business with a customer who demands unreasonably low prices is not good policy, according to Al Baron, because such a customer is usually a slow payer; he jumps from one wholesaler to another. That customer is not operating on a profitable basis himself. "So, a supply house with a customer like that is individually hurting its own good customers," Baron explains.

Joe Ball sums it up thusly: "The whole thing in a nutshell is to decide who you want to do business with. I take my orders and deliver them. If it's around the 25th of the month, and they are short, I'll tell them not to worry about the 10th. Helps sales too, especially around Christmas. Sometimes they can even take two months to pay."

• **His Ambition**—Oddly enough, despite all his mileage, Joe has only one speeding ticket, so far—that, while delivering a $2.00 fixture. Someday, he says, he'd like to leave around 10 a.m., go all the way out to the Hamptons, without once going over 35 mph. "I'd like to see some of the country," he explains with a grin.



PLUG-IN POWER WHERE YOU NEED IT . . . IN MINUTES! Each section of plug-in duct is 10 feet long with five plug-in openings on each side. Exclusive scarf-lap construction joins sections in a rigid form. Standardized plugs are fastened to casing flanges at plug-in openings. Reinforced fingers engage bus bars for positive pressure contact.



BULLDOG PLUG-IN DUCT WITH ALUMINUM CONDUCTORS GIVES

Lightweight, Flexible Power

at low cost!

CUTS DOWNTIME! 100% REUSABLE! SAFER, MORE EFFICIENT POWER!

Sell customers on providing for *future* as well as present electrical requirements. Recommend and install BullDog Plug-in Duct—the completely flexible, reusable electrical distribution system that provides instant plug-in power wherever, and whenever, it's needed.

Simple to install, rugged plug-in duct allows circuits to be swiftly added or removed without rewiring. Downtime is cut, too! New tool setups can be made, machines shifted, lighting revamped, without interrupting the flow of power.

Whatever the power requirement, present or future, your customers are always prepared with BullDog Plug-in Duct. Your nearby BullDog Field Engineer will provide experienced assistance. Or write: BullDog Electric Products Company, Detroit 32, Michigan.

©BEPCO

IF IT'S NEW
. . . IF IT'S DIFFERENT
. . . IF IT'S BETTER . . . IT'S

BULLDOG

ELECTRIC PRODUCTS COMPANY
A Division of I-T-E Circuit Breaker Company

Export Division: 13 East 40th Street, New York 16, New York. *In Canada:* BullDog Electric Products Company (Canada), Ltd., 80 Clayson Road, Toronto 15, Ontario.

BECAUSE...

BERKO IS PREFERRED BY CONTRACTORS AND CONSUMERS, too!

BERKO is a quality line . . . the industry leader, well-known for finest design and performance.

BECAUSE...

BERKO SOLVES THE WHOLESALER'S BIGGEST HEADACHE...

by offering a product with top Brand Identity, one which can be sold, and handled by the trade at a fair profit.

BECAUSE...

BERKO STAYS AHEAD OF THE ELECTRIC HEATING INDUSTRY,

with promotion and new products presented when they do *you* the most good. Check the two fine new products shown below, offered just at the right time for you to profit during the big Fall heating season!

Be one of the alert wholesalers who have learned how profitable it is to feature BERKO. Write today to:

BERKO ELECTRIC MFG. CORP. DEPT. EW 8 — 212-40 Jamaica Ave., Queens Village 28, N. Y.

BERKO GLASS ELECTRIC RADIANT HEATING

New AW "Stars"

Continued from page 47

not surprisingly, a great need for rewiring in pre-1935 homes.

In short, the study broke no sales records, but it showed that there is a sellable market—and that the industry once again undersold itself. This year's program, integrating these results, includes direct mail (again to single-telephone addresses) plus TV and newspaper ads (stressing points the consumer can easily grasp, such as appliance and outlet needs).

Distributors are represented on this committee by R. V. Horton, Westinghouse Electric Supply Co.

• **Adequate Wiring.** The cornerstone of any wiring program, is receiving continued support. Certifications are running at twice the rate of a year ago (EW—July '55, p. 135). At the March Chicago Better Wiring Conference, recognition was given to 27 builders (all of whose 1954 homes were AW-certified) and 20 contractors (each of whom had wired over 50 AW homes).

Another part of this committee's work has been the publication of the booklet, "Certified Adequate Wiring Standards for Chicago and Northern Illinois." The booklet dramatizes the differences, by section number, between the Chicago code and AW standards.

On this committee are distributors Saul J. Weinress, Efengee Electrical Supply Co., and Leo Mayer, Hyland Electrical Supply Co.

• **Educational.** Giving additional breadth to the overall program, this committee is establishing a speakers' bureau; some 50 industry experts who will be available for speeches before

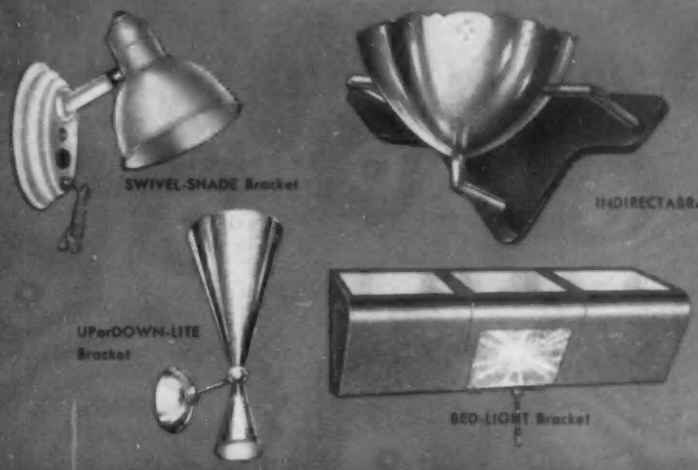
TWIN BARRELS

"These chicken-or-egg-first arguments about the best way to sell wiring are futile. We want to take in both. That's why we're running our Electric Living Institute at the same time as the BW program."

This reasoning, voiced by Clif C. Simpson, managing director of Chicago's Electrical Association, explains that group's emphasis on the "world's largest" (17,000 sq. ft.) display of electrical appliances. A twin to BW in the creation of public demand for wiring, the Institute is backed by 25 distributors and is now running in the Loop.

BRIGHTEN DARK CORNERS AND NEAR-WALL AREAS WITH

INCANDESCENT

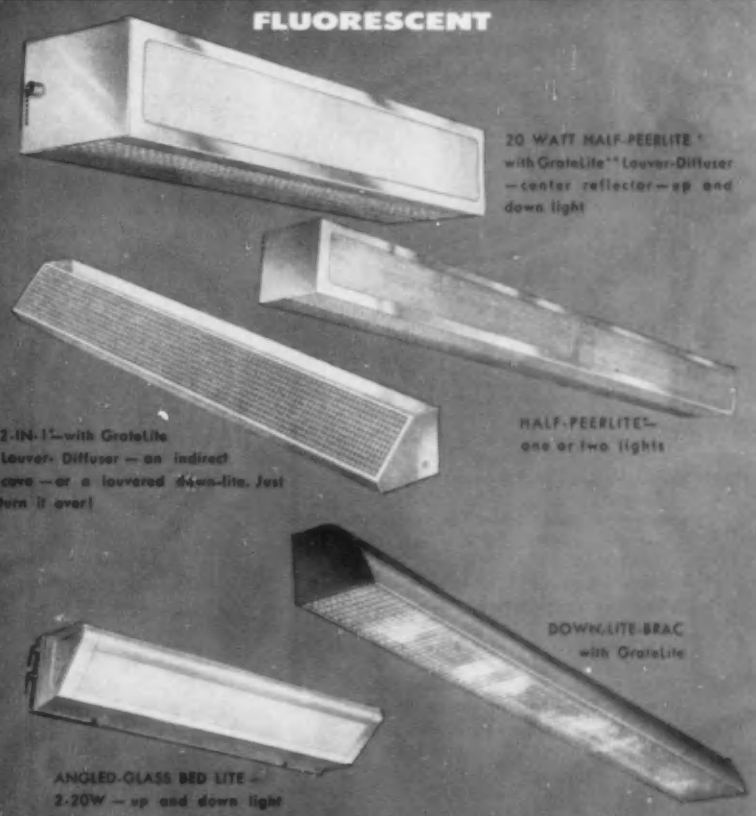


GUTH BRACKETS
(YOU NAME IT . . . WE MAKE IT!)

APPLICATIONS GALORE!

. . . in barber shops; fitting rooms; over hospital beds, chalk boards, mirrors; for desks near walls; along ceiling beams . . . and many other spots that are difficult to light efficiently with conventional fixtures.

FLUORESCENT



TRUSTED
NAME IN LIGHTING
SINCE 1902

WRITE ON YOUR LETTERHEAD FOR BULLETIN 929-G TODAY

THE EDWIN F. GUTH CO. • ST. LOUIS 3, MO.

*Trademark Registered

**Trademark Registered U. S. & Can. Pat. Pend.

PORCELAIN PRODUCTS' Service Mast KIT

MAKES INSTALLATION FASTER...EASIER

STANDARD FOR 2" PIPE

Also available FOR 2½" PIPE

EVERYTHING FURNISHED

but the house and conduit

Here is the *only* Service Entrance Mast Kit complete in every detail—including roof flashing—even necessary bolts, nuts, lag screws and nails. Can be *installed* by an *electrician, with electricians tools.*

Cut down installation costs with these easier, quicker to install, service entrance mast kits.

Here is a complete list of the parts you'll find in this Porcelain Products' Service Mast Kit.

√UL approved Service Entrance Cap and Bell Reducer

√Galvanized Roof Flashing and Storm Collar

√Roof Mounting Plate of new and original design

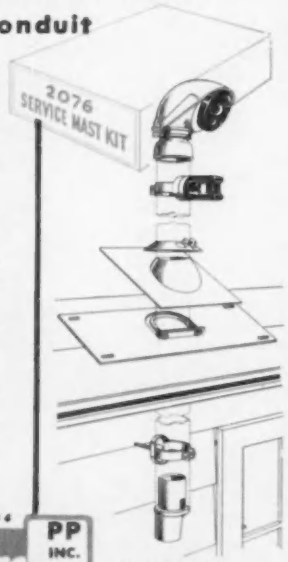
√Conduit hanger with 2¼" lag screw attached

√Slip-fitting offset reducer with interior grounding device

√All necessary bolts, nuts, lag screws and nails

√Plus—Porcelain Products' famous 2061-C Pipe Mounting house brackets as specified

WRITE FOR DETAILS TODAY!



ELECTRICAL PORCELAIN SINCE 1894

61 Years Porcelain Products, Inc. PP INC.

FINDLAY, OHIO

CATALOG NO.
2075 — NO WIREHOLDERS
2076 — 1 WIREHOLDER
2077 — 2 WIREHOLDERS
2078 — 3 WIREHOLDERS

Chicago-area groups. Four main groups will be covered: residential (such as women's clubs), technical (industrial plants, etc.), management (trade associations, etc.) and educational (from junior high through trade schools).

This committee, which is headed by Bolan H. Boatner, district manager for Wesco, also will handle general wiring displays and organization of the BW Conference. The latter is held annually, giving industry people a chance to measure progress and settle on future plans.

• **Apartment Houses.** Two of six projected mailings have been made to a selected list of 22,000 apartment house owners and management firms. Working closely with the real estate group, this committee plans to cash in on the estimated 500,000 apartment units needing electrical modernization. The main pitch: stop tenant turnover. Leads from returned cards will be turned over to contractors for follow-up.

• **One Goal**—In addition to the BW program itself, the wiring movement in Chicago has taken a boost from the local utility. Commonwealth Edison is now offering a share-the-cost rewiring package to its customers through contractors. The utility is also featuring BW in its advertising.

Heading up the BW program for the Electric Association is Roger Kellogg, its secretary. He points up the single purpose of BW's supporters:

"A house conforming to Chicago code might cost $16,500. Revise the plans to meet AW specifications and the electrical cost will go up about one per cent. That's plus-business for everyone. Distributors, for example, can figure that $50-75 of that total will be materials alone. And that's all created business."

JOSEPH F. IGOE, left, executive vice president of Igoe Brothers, Inc., Newark, is pictured at the franchise signing of the firm which will distribute TV receivers in northern New Jersey for Du Mont. Dr. Allen B. Du Mont looks on.

"We insist on a combination of quality and service in any line we carry . . . *Rome Cable gives us both*"

Mr. Irving P. Bean, *President*
Bean Electric Company
Seattle, Everett, and Wenatchee, Washington

"We began carrying Rome products in 1948, and we've always found their service and product quality beyond reproach. Rome service has helped us win new customers and keep old ones. And it is our experience that Rome products—wire and conduit—are well known and widely accepted.

"We recently opened our third house at Wenatchee. The wholehearted co-operation of the manufacturers, like Rome, whose products we sell, has certainly been a vital factor in our growth."

To what Mr. Bean has said, we'd like to add that we believe completely in a strong distributor policy. We work to back our distributors, give them whatever sales or engineering help they may want.

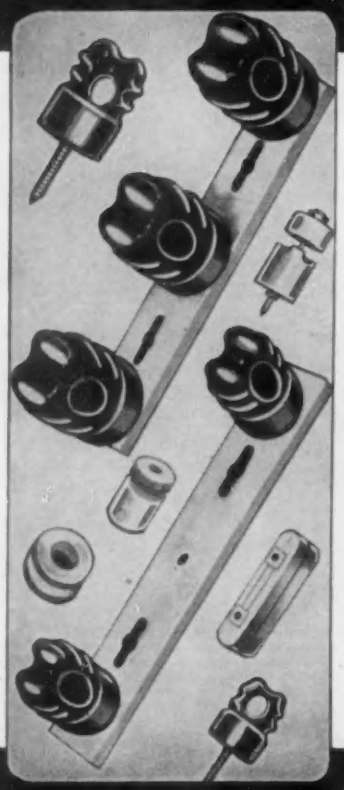
We believe in serving both the distributor and his customers on a close, personal basis, as partners and friends in mutually profitable business dealings.

It Costs Less to Buy the Best . . .
and it's profitable to sell the best

ROME CABLE ROME, N.Y.

ROME CABLE
Corporation
ROME · NEW YORK
and
TORRANCE · CALIFORNIA

You Can Make A Good Wiring Job
BETTER
WITH
UNIVERSAL PORCELAIN INSULATORS



Your wiring installations will be *right* from start to finish when you use UNIVERSAL porcelain insulators! They have uniform body density, high dielectric and physical strength, resistance to temperature extremes, moisture, fumes, smoke and most acids...your positive assurance of long, trouble-free service.

THE UNIVERSAL
CLAY PRODUCTS CO.
1549 EAST FIRST ST.
SANDUSKY, OHIO

Report on Railroads: Traffic, Products

NEW YORK, N. Y.—The railroads carried only 52 per cent of all intercity freight in 1953, compared with over 75 per cent in 1926, according to the National Industrial Conference Board.

A recently completed analysis found that competitive carriers have not only diverted traffic away from the railroads, but have also captured more and more of the new products and new traffic routes of an economy that has been both expanding and shifting geographically.

• **Bulk In Low Volume**—The NICB analysis also shows that although railroads have been able to retain their competitive advantage in transporting bulk commodities of low value per ton, such as coal, ore and coke, this concentration of freight tonnage among such basic commodities has made the railroads particularly vulnerable to cyclical fluctuations in industrial activity.

A recession, as mild as that in 1954, brought about a 12 per cent drop in freight car loadings. In 1953, coal accounted for 17 per cent of total carloadings; coke and ore 10 per cent. But in 1954, carloadings of coke dropped 39 per cent; ore 33 per cent; and coal 12 per cent. Together, these declines overwhelmed a 4 per cent increase in the movement of grains and relatively small decreases in that of other commodities.

• **Inroads**—In 1939 railroads moved 338 billion ton miles of goods, amounting to 63 per cent of total freight traffic, while water carriers transported 17 per cent; pipelines, 10 per cent; and motor trucks 10 per cent. In the next two years truck transport increased more than 50 per cent, but was halted at the outbreak of World War II and resulting fuel and tire shortages. By 1943, railroads were moving more than 70 per cent of all freight.

At the end of the war, however, demands for railroad freight service dropped sharply, while the facilities and traffic of competing carriers multiplied. In 1946, railroad ton-miles fell below 1942, while motor truck traffic quickly recovered to its prewar level, and pipeline shipments, through facilities installed during the war years, were up 50 per cent.

Over the post war years, the trend of railroad freight traffic was slightly downward. In 1953, the ton-miles of railroad freight constituted only 52 per cent of total shipments. However, ton-miles of freight hauled by truck was four times greater than prewar, and accounted for 17 per cent of all freight traffic in 1953. Ton-miles of liquids and gases moved through pipelines was three times greater than pre-war, and accounted for 14 per cent of total traffic.

• **Diversion** — Railroads have not only yielded an increasing share of total freight traffic to competing carriers, but they have actually lost ground in the case of their two highest freight classifications. These particularly well-paying commodity groups are "animals and products" and "less-

NEW BUILDING of the National Electric Supply Co., Ltd., Honolulu, Hawaii, contains a total of 10,000 sq. ft., including a mezzanine. An additional 6,000 sq. ft. of land is adjacent to the structure for future expansion. The business, started in 1949, by A. J. Vivas and his son, later became a partnership and in March, 1954, was incorporated. National Electric covers the Hawaiian Islands and employs nine people.

Roller-Smith

PROUDLY ANNOUNCES the

NEW...

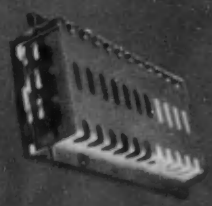
UNI-BUS BUSWAY

A New Concept in busway systems that obsoletes all other methods of carrying current.

- Low Voltage Drop in ***PLUG-IN*** AND ***FEEDER*** TYPES.
- High Short Circuit Strength in ***PLUG-IN*** AND ***FEEDER*** TYPES.
- ***ONE FLEXIBLE FITTING*** makes elbows, offsets —simplifies engineering and eliminates costly delays.
- ***COMPLETE SAFETY*** because live bus bars at plug outlets and live connections in plugs are eliminated.

And All at Lower Cost!

Roller-Smith
CORPORATION
ELECTRICAL SWITCHGEAR
BETHLEHEM, PENNSYLVANIA



ECONOMY

New clip-on hanger and lighter weight busway mean less installation time. Feeder system often costs less than conduit and wire, YET is 100% reusable.

FLEXIBILITY

Flexible connector eliminates all special fittings so that a minimum number of components meet all job requirements. Plug-in and feeder systems interchangeable.

SAFETY

Interlocked safety slide over plug outlet cannot be opened until covered by plug. Interlocked cover and visible contacts in plug are positive assurance of safety.

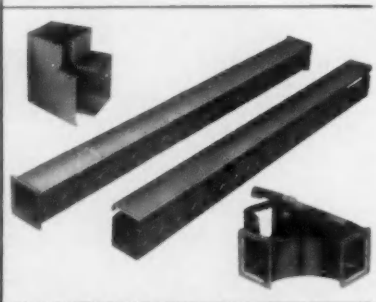
You can get WHAT you want WHEN you want it from the

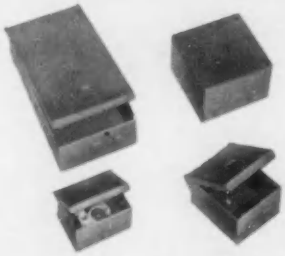
KEYSTONE QUALITY LINE

WIREWAYS AND FITTINGS · CUTOUT AND PULL BOXES
SWITCH BOXES · OUTLET BOXES · BAR HANGERS

SERVICE is the "keynote" at Keystone! And one good example is the fact that *every* item in the complete Keystone Line is stocked for *immediate shipment* direct from modern factory warehouses. No waiting for production, no delayed deliveries, no fooling around with partial shipments. And it all adds up to lower inventories, faster turnover, more satisfied customers for you!

KEYSTONE WIREWAYS and Auxiliary Fittings have all the time-saving, money-saving features your customers want. They're quickly, easily installed, readily adaptable to any power distribution system. Available, too, in both flanged and flangeless styles and a wide range of sizes and lengths . . . from 2½" x 2½" x 1 ft. through 8" x 8" x 5 feet long.





KEYSTONE CUTOUT BOXES and Pull Boxes are furnished in Type "A" with hinged cover, Type "SC" with screw cover. Both feature a formed construction strongly fabricated and securely welded . . . with adequate, easily removable knockouts. And both types are available in a complete range of sizes . . . stocked for prompt delivery to meet your needs.

KEYSTONE SWITCH BOXES and Outlet Boxes are loaded with extra quality features! BX or Romex clamps are already assembled with nested fit for easy pulling of wires. Knockouts and pri-outs come out double quick. And tapped holes are extruded to provide extra thickness, eliminate stripping of threads. Even mounting brackets make installation easier.

New fact-filled, illustrated catalog presents the complete Keystone Quality Line . . . send for your free copy today!

KEYSTONE MANUFACTURING COMPANY

23328 SHERWOOD AVENUE • CENTER LINE (Detroit) MICHIGAN

. . . the Complete Line of Wiring Installation Equipment
Sold Only through recognized Electrical Distributors

than-carload" freight quantities.

In 1953 only 13.8 million tons of animals and products were hauled on railroads, compared to 15.0 million in 1939. The competition of trucks for this highly profitable type of freight traffic was a major cause of the decline. In 1933, trucks accounted for 44 per cent of cattle receipts in 65 important markets. By 1940 their share had risen to 51 per cent and by 1952, it had reached 76 per cent. The same diversionary trend hit the railroads in receipts of other livestock and animal products.

In 1953, only 8.3 million tons of less-than-carload freight originated on railroads, compared with 14.9 million tons in 1939.

Rome Cable Announces New Conduit Policy

ROME, N. Y.—The Rome Cable Corp. announced a new merchandising policy on rigid conduit last month.

G. E. Rolston, vice president and director of sales, in a letter to the firm's rigid conduit customers, discussed quantity differential and factory shipments. He noted that during the past several months Rome Cable had noted "an increasing trend toward the practice of making direct job shipments of rigid conduit against orders which we feel should be filled from a distributor's stock."

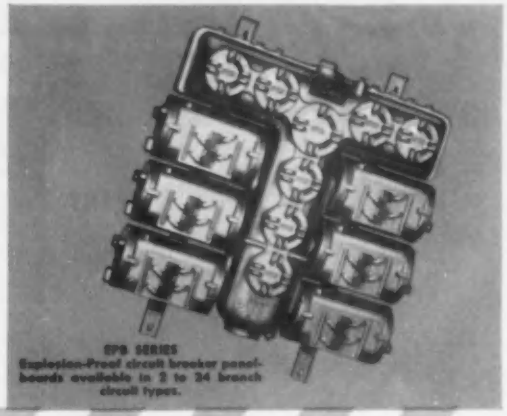
The company said that this seemed to be particularly true in areas adjacent to rigid conduit warehouses and mills and that the practice had created cost burdens at both the manufacturer's plant and his local warehouse.

"In addition to the cost burden, we are also conscious of the fact that in making these smaller direct shipments for the jobber, the manufacturer is assuming the important functions of stocking and shipping which are properly the responsibilities of the distributor."

Rome Cable, to overcome the extra cost and to encourage its distributors to fulfill their function of stocking and shipping, said they were establishing quantity price differentials effective with all orders entered on and after July 11, 1955.

The letter concluded, "We believe that you as our distributor will agree that this action is constructive in every sense and that its effect will materially improve the situation as it has existed in the past. We look forward to your continued support."

SPECIFY...
PYLETS®



EPB SERIES
Explosion-Proof circuit breaker panel-boards available in 2 to 24 branch circuit types.

FOR HAZARDOUS LOCATIONS

Second to none for...

SAFETY: Explosion-proof and dust-tight PYLETS *exceed* code requirements and provide maximum protection for personnel and property against fire and explosion.

ECONOMY: PYLETS are designed for quick, easy installation and convenient maintenance. Rugged construction insures a long service life.

- TAPER TAPPED HUBS
- SMOOTH, ROOMY INTERIORS
- QUICK ACTING JOINTS
- DEPENDABLE MECHANISMS
- ALUMINUM ALLOY OR HEAVY CADMIUM PLATED FERROUS ALLOY CASTINGS

Sold Nationally Through Authorized Distributors
Literature furnished on request

SINCE 1897

THE PYLE-NATIONAL COMPANY

WHERE QUALITY IS TRADITIONAL
1352 North Kostner Avenue, Chicago 51, Illinois

District Offices and Representatives in Principal Cities of the United States • Canadian Agent: The Holden Co., Ltd., Montreal
Export Department: International Railway Supply Co., 30 Church St., New York

CIRCUIT CONTROLS • PLUGS AND RECEPTACLES • LIGHTING FIXTURES • FLOODLIGHTS

light FOR THE OIL OF THE WORLD

THE DERRICK
LIGHT & EQUIPMENT COMPANY
OF FORT WORTH, TEXAS

...uses "only the finest" in their drilling rig lighting systems!

BRONCO *Certified* 60
TYPE SO NEOPRENE-JACKETED PORTABLE ELECTRIC CABLE

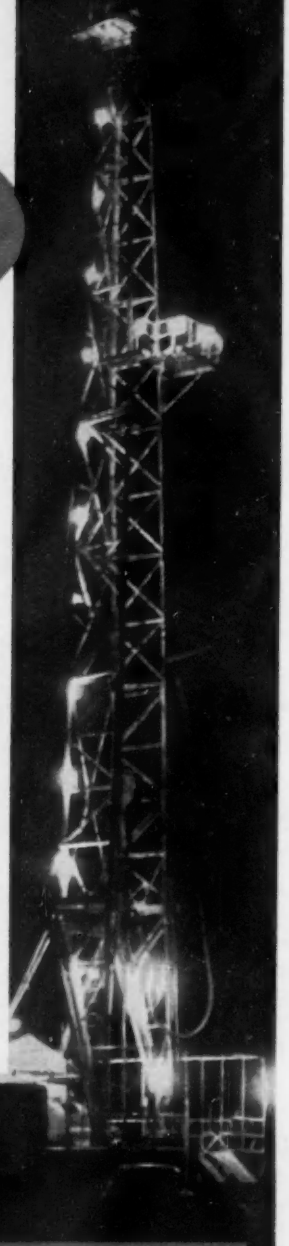
Exposed to weather, oil, vapor, sunlight, corrosive gases, ozone—twenty-four hours a day—nothing but the very toughest electric cable made can be depended upon to supply current for the vital lighting system of a drilling rig.

The Derrick Light and Equipment Company uses "only the finest grade of Neoprene Jacketed Cable" in the lighting systems they manufacture. Their systems are famed the world over for dependability and long life.

Bronco 60 Certified was selected for this use because the outer protecting jacket contains a bonus quantity of Neoprene—not less than 65.46%. Further, jacket contents are certified by a Registered Professional Engineer. This large quantity of Neoprene gives maximum protection from oil, grease, gasoline, kerosene, sunlight, ozone, acids and alkalis, heat and cold—all of the elements which attack and destroy ordinary rubber coverings.

Bronco 60 Certified is available in all types and sizes of portable cords and cables used in the oil field—Type SO, Type W, Type G, Type SJO, Welding Cable, Single Conductor for motor and power leads, and Multi-Conductor Control Cable. Bronco Shot Firing Cord is made with a bright Red Neoprene jacket.

Bronco 60 Certified is engineered and Synchro-Cured for maximum flexibility. Jackets are branded with full identifying data—name, type, size, number of conductors, and rated voltage. Eligible sizes bear the symbol "P116BM," flameproof approval number of the U.S. and Pennsylvania Bureaus of Mines.



We will be happy to send you a complete catalog, on request, together with the name of the nearest electrical wholesale distributor or oil field supply store handling Bronco 60 Certified.

Write or wire
WESTERN INSULATED WIRE CO.
Los Angeles 58, California

Vacuum Tubes Face Fast-Rising Threat

NEW YORK, N. Y.—Transistors are replacing 22 per cent of the vacuum tubes in electronic equipment now under development by 19 manufacturers, a survey by Aviation Week, McGraw-Hill publication, discloses. This figure is expected to rise to 38 per cent by 1956 and to 50 per cent by 1960.

With magnetic amplifiers, transistors appear to be a serious threat to vacuum tubes in aviation electronics. The two-tube substitutes are being used in 33 per cent of the sockets in equipment now under development.

General Cable Acquires Electrical Wires Plant

NEW YORK, N. Y. — General Cable Corp. has embarked on a major expansion program, I. T. Bennett, chairman of the board and J. R MacDonald, president, have announced.

The officials disclosed that General Cable had entered into a contract to acquire General Insulated Wire Works, Inc., Providence, R.I. The plant occupies about 100,000 sq. ft. and employs some 300 people. C. J. Craig, president of General Insulated Wire Works, Inc., will be appointed a vice president of General Cable.

The company will also construct a new plant at Monticello, Ill., to make paper and lead covered telephone cables.

General Cable in addition has arranged with the Canada Wire and Cable Co., Ltd., to form a new company to manufacture telephone wires and cables in Canada.

Nesco Announces New Distributor Policy

MILWAUKEE, WIS. — Mr. H. H. Martens, Nesco's general sales manager, announced last month that the company expects to complete its new selected electrical distributor policy in all major markets prior to October 1st.

The new policy is to select one electrical distributor and one hardware distributor in each market who will distribute Nesco electrical houseware products in that market.

The reason cited for the adoption of the new policy was that the manufacturer had added additional items in recent months, and that the proper sales promotional activities were not being achieved with the distribution pattern which Nesco has at this time.

Boost

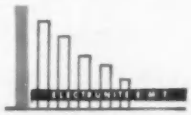
your sales volume with these Republic "Inch-Marked" E.M.T. Exclusives

"GUIDE-LINE" . . . newest exclusive sales feature for easier bending alignment and better visibility. Eliminates "waws". On sizes ½", ¾", 1" and 1¼".

"INCH-MARKING" . . . an exclusive sales feature that teams up with the ELECTRUNITE Bender for easier fabrication and installation. In sizes ½", ¾", 1" and 1¼".

"DEKORON®-COATED" . . . plastic armor for E.M.T. and Conduit provides longer service in severe-corrosion locations . . . an ELECTRUNITE exclusive.

INSIDE-KNURLING . . . another ELECTRUNITE exclusive. By actual tests makes wire-pulling easier. In sizes ½", ¾" and 1".



ACCEPTANCE . . . first in preference by brand name in unbiased surveys . . . an ELECTRUNITE feature.

When you get your prospect to stack up the advantages of Republic ELECTRUNITE "Inch-Marked" Electrical Metallic Tubing in comparison with any other brand, you are well on your way to securing another steady customer. And when you point out how these ELECTRUNITE features and Republic Quality provide ease of installation and reduced waste . . . you've clinched the sale. Then, let your customer see for himself how he gains in convenience and economy. He will come back to you for more ELECTRUNITE . . . and his other electrical needs as well.

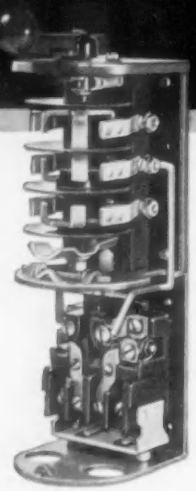
You can get the ball rolling through a direct-mail campaign to your prospects. Republic offers folders, stuffers, catalog inserts, ad reprints . . . a complete package of promotion materials *bearing your imprint.* Call your Republic representative for your supply today. Put this material to work for you telling your customers how "Inch-Marked" E.M.T. gives them the best run for their money.

REPUBLIC STEEL

Steel and Tubes Division • 215 East 131st Street, Cleveland, Ohio

World's Widest Range of Standard Steels and Steel Products

ENGINEERED for DOUBLE-DUTY!



A REVERSING DRUM CONTROL with . . . BUILT-IN THERMAL OVERLOAD UNIT . . at a lower cost

To You!

Only Furnas Electric offers you this exclusive feature. *Costs less than one-half what you would pay for manual reversing starters to perform the same job.*

Its advantages—smaller size, fewer operating parts and lower cost—add up to a better control for you.

Furnas Electric has the right drum controller for your every control requirement—over 1000 models to choose from.

Write today for free 48 page catalog 5509—Furnas Electric Company, 1069 McKee Street, Batavia, Illinois.

FURNAS ELECTRIC COMPANY
BATAVIA, ILLINOIS

Sales Representatives in all Principal Cities

It's Built On Flexibility

Continued from page 61

in the past was a bowling alley, a furniture store and a garage, empty bins were spotted behind the sales counter for later expansion and for future storage of favorite lines of merchandise.

Additionally, residential and commercial lighting fixtures have been installed in the centralized offices of President Newman and his brother, Harold Newman, who is vice-president, for the benefit of the customer who might wish to see a particular fixture as he is discussing its price.

• **Merchandise Filed** — Connecting the sales counter with the shipping department are rows of bins in which merchandise has been filed by inventory control index and stocked according to the manufacturer. For flexibility between the front and back of the house, items purchased mainly by contractors have been spotted toward the front of the bins for the convenience of the city salesmen, and items handled by shipping clerks are located toward the rear. This eliminates much of the traffic between the two sections and speeds up the service to the customer.

A 13,500 sq. ft. warehouse comprises the second floor, where ceilings are 20 feet high. With this vertical space, more bins and racks can be added as business is increased. First-floor ceilings are 16 feet high. A conveyor belt is used to move merchandise between the two floors. The device was used to move all items stored in the old warehouses to the upper floor of the remodeled building, and has paid for itself already, Sol Newman says. With the exception of the safe, the entire stock was moved by employees after working hours from the old location.

Although business in the new location got underway May 2, an open house was held June 23, at which about 500 persons inspected the new facilities. Thirty employees and five outside salesmen are employed in the 27,000 sq. ft. building, which is 60x213 feet.

Graybar Announces New Appointments

NEW YORK, N.Y.—The Graybar Electric Co., Inc., announced several new appointments last month.

E. W. Windahl has been appointed branch manager at Indianapolis. Mr. Windahl, who was manager at Duluth from June, 1953, until receiving his present appointment, joined Graybar in 1936. He spent the first six years as a salesman, becoming procurement advisor in 1942.

E. W. Windahl

D. A. Hilger

D. A. Hilger succeeds Mr. Windahl as manager at Duluth. Mr. Hilger started with Graybar at St. Paul in July, 1944, as procurement advisor and later became a combination salesman. He was manager, inside construction sales at Minneapolis since October, 1951.

Glen E. Moore, major appliance division manager announced the following appointments: Earl M. McCutcheon as sales manager; Harold V. Bell as financial manager; Roy Cunningham as manager, Bendix laundry equipment sales; Irwin Schutzer as manager, electronics sales; William B. McGhee as office manager; and E. "Manny" Papandreas as service manager.

Set Up Biddle Trade Publishing Company

LOS ANGELES, CALIF. — The price book publishing activities in the electrical field in the eight Western states will now be done under the name of Biddle Trade Publishing Co. instead of Biddle Trade Bureau.

A. H. Gudie announced that the Biddle Trade Publishing Co. was being set up as a division of the Biddle Trade Bureau, which still remains the parent corporate structure. This has no effect upon Trade Service Publications in Chicago which will remain the same.

Gesco Fills Two Posts

CHARLOTTE, N.C. — Clifton C. Canedy is the new district manager for General Electric Supply Co.'s supplies and apparatus branch in this city. E. L. Dugger has been promoted to district manager for consumer goods, Virginia district.

NEW CLIFTALL UF CABLE

means lower cost for

single conductor available in sizes 14 through 4, standard color is black.

Two conductors available in sizes 14 through 10, with or without ground wire. Standard color is Ivory.

Three conductors available in sizes 14 through 10 without ground. Standard color is Ivory.

Direct burial and underground feeders.

Branch Circuits in moist, damp and corrosive locations.

In masonry blocks or wall tiles

Here's the all purpose cable that solves a great many of your problems. Tough, durable CLIFTALL UF is the economical answer to underground wiring, including direct burial, as feeders, and branch circuits, when provided with overcurrent protection.

In addition, CLIFTALL UF can be used either exposed or concealed in dry, wet or corrosive areas, in masonry block, or imbedded in plaster.

In CLIFTALL UF, bare copper conductors are insulated with high quality thermoplastic, color coded for convenience, then covered with reinforced fiber glass. The parallel conductors are then sealed as a unit in high quality thermoplastic that can withstand the most rugged conditions.

Approved by Underwriters Laboratories, Inc., and recognized by National Electric Code (1953). CLIFTALL UF is available in sizes 14 to 4 AWG, single conductor only; 14 through 10 in two conductor with and without ground, and 14 through 10 in 3 conductor without ground. Use CLIFTALL UF and be sure!

Also recognized for use as TYPE NMC (non-metallic sheated cable, corrosive resistant.) Section 3362, a and b.

WRITE TODAY
For Full Information

Warehouses Throughout the Country.

REPRESENTATIVES
IN PRINCIPAL CITIES

Clifton
CONDUIT COMPANY, INC.

MAIN OFFICE
75 Montgomery St.
Jersey City 2, N. J.
FACTORIES
MEMPHIS
Tennessee
BALTIMORE
Maryland

WIRE CABLE RIGID CONDUIT ELECTRIC METALLIC TUBING CLIFTALL UF

Conforms to the standards of the Electrical Service Connector Institute

DOSSON "F" SPLIT BOLT CONNECTOR

Fabricated from high strength alloys (better than average steels), the Dosson "F" is cold-formed for uniform quality. Maximum contact pressure is assured by a high translation of tightening torque. Full length pressure bars with rounded edges prevent load concentration and crushing of conductor. Built to withstand high overload, vibration. Highly corrosion resistant.

Mail coupon for FREE Dosson "F" Connector

LISTED UNDER REEXAMINATION SERVICE UL UNDERWRITERS' LABORATORIES, INC.

DOSSERT MFG. CORP.
249 Huron St., Brooklyn 22, N. Y.

Gentlemen:
Please rush free sample Dosson "F" Split Bolt Connector plus catalog sheet.

Name ..... Title .....
Company .....
Address ..... Zone ..... State .....
City .....

50 YEARS OF TECHNICAL KNOW-HOW

DOSSERT MFG. CORP.
249 Huron St., Brooklyn 22, N. Y.

Trumbull Expands Marketing Organization

PLAINVILLE, CONN.—Two new product sales organizations have been formed at G.E.'s Trumbull components dept. according to R. C. Hanna, manager, marketing.

Mr. Hanna announced the appointments of P. E. Eldridge of Wethersfield, Conn., as manager, industrial sales and of J. D. Hopkins, Jr., of Farmington, Conn., as manager, service entrance equipment sales. The position of manager, component sales, which was previously held by Mr Hopkins, has been discontinued.

This expansion of the Trumbull components headquarters sales organization was designed to facilitate the introduction of new products and to improve service to customers, it was explained.

Gesco Names Dunning

BRIDGEPORT, CONN. — Clayton P. Dunning has been named national marketing manager of the General Electric Supply Co.'s small appliance division. He was formerly New York district manager for the small appliance division. Mr. Dunning succeeds D. E. Weston, Jr., who remains as Gesco's marketing manager of radio and television.

Sierra Electric Moves

GARDENA, CALIF. — Production of electrical devices, plastic products and electric components is now under way in the new manufacturing plant of the Sierra Electric Corp. Consolidated. At the new site are manufacturing, warehousing and office facilities formerly housed at five separate locations in the Los Angeles area.

J. J. LIESKE, JR., is district sales manager at Graybar Electric Co.'s Chicago office. He started at Chicago in 1922 as a clerk. Mr. Lieske was branch manager at Washington, D. C. since June, 1953 until March, 1955 when he became headquarter's representative handling government business in the nation's capitol.

Blackhawk's

NEW

Slip-fitter Service Entrance Head

WHAT COULD BE SIMPLER TO USE OR TO SELL?

- ***No threads to cut***
- ***Strong, neat single-unit slip-fitter housing frame***
- ***Simple one step installation***

Your customers don't have to spend time, money and labor to cut threads or pay for separate slip-fitters and extra clamping parts! Blackhawk now furnishes the simple, neat, *complete* new Service Entrance Head. Show it and sell it!

The housing frame *is* the slip-fitter for the new Blackhawk Service Entrance Head. Just tighten two screws. And it's neat — the set screws tighten directly on the conduit, so only the heads show.

The new, completely-protected Blackhawk ductile aluminum Service Entrance Head is now available in the most-wanted 1¼-inch size; full range of sizes will be available soon.

Modern simplicity at its simplest, the Blackhawk Service Head is its own slip-fitter. Simply slip it on any type of conduit and tighten with a screwdriver.

Immediate delivery . . . to electric wholesalers only

Specify B-I when you buy!

Blackhawk Industries

BLACKHAWK INDUSTRIES
Dubuque, Iowa

THE *New* Peerless® Electric
BACKWARD CURVE
BLOWER CATALOG

A COMPLETE, CONCISE, EASY-TO-UNDERSTAND GUIDE TO BIGGER PROFITS AND BETTER INSTALLATIONS

This fact-packed 36-page catalog tells you everything you need to know about backward curve blowers in language you can understand. It shows the complete range of sizes from 12½" to 36½"; lists all performance ratings for each size at each motor rating; shows all variable speed ranges; gives you fingertip reference to CFM ratings, outlet velocities, discharges and rotations. All blower performance ratings are guaranteed by Peerless. These facts, plus the great, new, Peerless Backward Curve Blower, are the keys to bigger jobs, bigger profits, and trouble-free installations. Write for your copy today.

Peerless Electric

FANS · BLOWERS · MOTORS · ELECTRONIC EQUIPMENT

PEERLESS ELECTRIC

THE PEERLESS ELECTRIC COMPANY • 1403 W. MARKET ST. • WARREN, OHIO

Continued from Page 8

Radiant Heaters

Heatmore, Inc., Brooklyn 6, N. Y.

Several design and construction improvements are now incorporated in all wall-mounted and baseboard ceramic radiant heaters. The nichrome wire has been completely imbedded in a special, one-piece ceramic panel. The thickness of the panel has been increased to ⅝-inch. A new method of termination has been designed to assure life-long positive contact and trouble-free operation. No field wiring or dismantling of the heater on the job is necessary.

Fluorescent Fixtures

Sylvania Electric Products Inc., New York 19, N.Y.

Group of eight and sixteen-foot fluorescent lighting fixtures feature the recently developed high output rapid-start lamp. "King-Size" line is especially designed for supermarkets and large drugstores. Available in both single and double lamp units. Said to be adaptable for wall-to-wall lighting systems where high intensity levels are desirable.

Strain Insulator

Electric Service Mfg. Co., Philadelphia, Pa.

High-strength, 750-volt capacity strain insulator is said to be the smallest on the market. Measures 2-in. in diameter and $2\frac{13}{32}$ in. in length. Manufacturer says, that despite its small size, the insulator has ultimate mechanical strengths, depending upon the assemblies, as high as 14,500 lbs.

Load Centers

General Electric Co., Trumbull Components dept., Plainville, Conn.

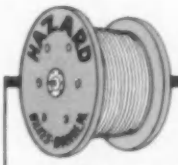
Circuit breaker load centers are for service entrance equipment. A snap-action spring clip allows load center interiors to be installed and removed without screws, tools or any adjustments. The units are designed for use in all sizes of homes, apartment houses and light commercial applications, such as garages, shops and small office buildings. Available with 8, 12, 16 or 20 circuits. Equipped with 100 ampere main lugs. This higher rating was recently recommended for residential service entrance equipment by the National Association of Homebuilders. U.L. approved.

and for the same reason: MOLD CURING

Truck tires are tough. Every one of them is vulcanized in a metal mold—mold-cured—to guarantee the brute strength and toughness it must have to lick the rutted pavements, gravel roads, rubber-eating skids and tremendous loads that are part of its day's work. Thorough, uniform curing makes the tire a uniformly rugged "shoe" incorporating the strength of all the individual components.

Hazacord cables are tough, too. Every foot of every tiny flexible cord or heavy high-voltage cable is mold-cured to give service-proved "truck-tire" toughness and durability. Even, thorough curing guarantees a strong, compact cable assembly that adds to the remarkable strength of its components yet retains maximum workability and flexibility. This long-lived construction has made Hazacord the solution to difficult installations where other portable cables have failed after relatively short operating periods.

For any type of portable power distribution in industry, mines or utilities there is a tough Hazacord construction that is best for the job. Ask your jobber or your nearest Hazard representative for details or write for Bulletin H-451, Hazard Insulated Wire Works, Division of The Okonite Company, Passaic, N. J.



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HAZACORD

Mold-Cured

portable cables

PRODUCT OF OKONITE RESEARCH

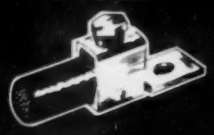
ILSCO CONNECTORS

MAKE YOUR PRODUCT PERFORM BETTER

VT 6 SIZES

600 MCM – #14

XT 6 SIZES



500 MCM – #14

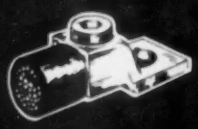
All these . . . and more . . . for YOUR BEST CONNECTIONS

U/L AND CSA TESTED	HI-RUGGED STRENGTH
PURE COPPER	RE-USABLE
100% CONDUCTIVITY	ALL WIRE SIZES
COOLER OPERATION	ECONOMICAL

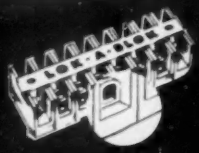
WRITE FOR
80-PAGE CATALOG

ILSCO CORPORATION
5746 Mariemont Ave.
CINCINNATI 27, OHIO

LO 7 SIZES



#1000 MCM – #14



TERMINAL BLOCKS

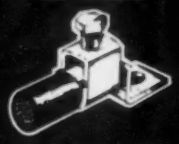
CAN NEUTRAL

60, 100 & 200 AMPS.

FUSE CLIPS

MANY SIZES AND TYPES

SLU 11 SIZES



#1000 MCM – #14

MU 3 SIZES

#600 MCM – #6

CALENDAR OF EVENTS

Illuminating Engineering Society
Nat'l. Technical Conference
Statler Hotel
Cleveland, Ohio
September 12-16
Technical meetings

NATIONAL ASSOCIATION OF ELECTRICAL DISTRIBUTORS
Pacific Zone
Empress Hotel
Victoria, B. C.
September 25-28
Meetings, panels

Electrical Progress Show
Convention Hall
Philadelphia, Pa.
September 27-29
Exhibits, meetings

Lake Michigan Club
Annual Meeting
September 29-30
French Lick Springs Hotel
French Lick, Ind.
Meetings, golf tournament

National Electronics Conference
11th Annual Meeting
Hotel Sherman
Chicago, Ill.
October 3-5
Meetings, exhibits, booths, technical programs

International Association of Electrical Leagues
20th Annual Conference
Toronto, Canada
October 5-8
Meetings, awards

Eastern Electrical Wholesalers Assn., Inc.
Third Nat'l. Electrical Industry Show
69th Reg't. Armory
New York, N. Y.
October 11-14
Exposition

National Safety Congress
43rd Exposition
Conrad Hilton, LaSalle, Congress, Morrison Hotels
Chicago, Ill.
October 17-21, 1955
Sessions on: industrial, traffic, commercial vehicle and transit safety; home, farm and school meetings.

National Electrical Contractors Assn.
Annual Convention
Waldorf-Astoria Hotel
New York, N. Y.
October 31-November 4
Meetings, awards

National Electrical Manufacturers Assn.
Annual Meeting
Traymore Hotel
Atlantic City, N. J.
November 14-18
Meetings

Air Conditioning & Refrigeration Exposition
Ninth Exposition
Auditorium
Atlantic City, N. J.
November 28-December 1
Exhibits, displays, meetings

THE NEW CUTLER-HAMMER LINE

OF HEAVY DUTY, OILTIGHT

Pushbuttons, Selector Switches and Lights

The new Cutler-Hammer Pushbutton with double pole contact block that measures only 1 3/32" in depth.

The new Cutler-Hammer Indicating Light with separate winding transformer that measures only 1 9/32" in depth.

New shallow-depth contact blocks; greater freedom of circuit arrangements; better design; better appearance; better performance. Get them first, get them fast, get them *now*.

Once again the name Cutler-Hammer companions great achievement . . . an amazing and unique new line of heavy duty, oiltight pushbuttons, selector switches and indicating lights. There is nothing to compare with it. The feature that stands out above all is the new basic working unit, the contact block—and its counterpart for the indicating lights, the transformer or resistor. *THIS NEW CONTACT BLOCK MEASURES ONLY 1-3/32" IN DEPTH BEHIND THE MOUNTING PANEL.* A fact of amazing consequence for the vast majority of pushbutton users.

Of even greater consequence is the greater degree of circuit flexibility this new design provides. With its contacts set side by side, "in parallel," electrically isolated from one another . . . *you can apply one voltage on one set, a different voltage on the other. Or you can impress alternating current on one and direct current on the other.* Each pair of contacts has its own actuating plunger; you can throw both simultaneously, or singly or in sequence.

And you can add contact block to contact block, one behind another, easily, simply, swiftly, giving you virtually unlimited circuit possibilities.

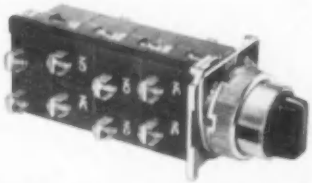
There is a complete range of operators: standard or extended length pushbuttons, with regular or mushroom head; selector switches providing maintained contact or momentary contact with spring return in either or both positions; key operators providing in addition momentary contact that becomes maintained on key withdrawal. Pushbuttons available in 5 colors. All operators are chrome-plated for lasting beauty. Indicating lights have new wide-visibility lenses proved by light-meter reading to be most visible of all from any angle. Lights are available with resistor or separate winding transformer. Transformer type with 6-volt bayonet lamp provides multiplied lamp life where shock and vibration prevail.

These and many other features are fully described and illustrated in a bulletin just published. Write for it today or see the complete line at your nearest authorized C-H distributor. CUTLER-HAMMER, Inc., 1327 St. Paul Ave., Milwaukee 1, Wis. *Associate:* Canadian Cutler-Hammer, Ltd., Toronto, Ont.

CUTLER-HAMMER
MOTOR CONTROL
C-H

New shallow-depth contact block has electrically isolated contacts, allows different voltage or different current on each pair of contacts.

Three separate contact blocks available; with 1 NO and 1 NC contact; 2 NO contacts; or 2 NC contacts.



Double pole contact blocks mount easily one behind another to provide unlimited circuit combinations.

Every type of operator: pushbutton, selector switch and key operator.

Mark up **STEADY**
year-round
PROFITS

with the
MARK-TIME
handy turn-off
Time Switch

illustrated
No. 9015

Provides automatic time control of:

- Farm and Stove Lights
- Industrial Ventilating Systems
- Garage Lights
- Heating Units - Neon Signs
- Air Conditioners
- Attic or Window Fans
- Gas Station Rest Room Locks

The MARK-TIME 9000 Series *Handy Turn-off* Time Switch is a "natural" for contractor sales. It's as easy to install as a toggle switch in a standard wall box — interchangeable with the toggle switch. Exclusive HOLD feature makes it easy to use as a standard toggle switch. Built for long, dependable service.

3 fast selling turn-off units for LONG and SHORT timing cycles: 9021—3 minute cycle, 9024—1 hour cycle, 9015—12 hour cycle.

M. H. RHODES, Inc.
Hartford 6, Connecticut

Manufactured and Sold in Canada by:
SPERRY GYROSCOPE OTTAWA Ltd., Ottawa, Ontario, Canada

How P. A.'s Rate Salesmen

- **Turnabout survey shows how purchasing agents rate salesmen, what they think of them and why.**
- **PA's aims and objectives—if they are to be successfully accomplished—depend on salesmen.**

EVERY purchasing agent is supposed to be dedicated to doing the best possible job for his company. Whether he is able to accomplish all its aims and objectives, depends a great deal on the salesman.

This statement was accorded to S. H. Bellue, chief of material, Hughes Aircraft Co., Culver City, Calif., and printed in the June 15th issue of Sales Management magazine.

Mr. Bellue had recently queried Hughes' 45 buyers as to what they expected of the salesmen who call on them. Here is what he found out.

Sixty per cent of the purchasing agents believed the salesmen did not know sufficient detail about their products. "In this fast moving world new products and new applications for products appear nearly every day, and the one who should be the best qualified to discuss detail and use of the product is the salesman. Buyers want to know . . ."

Fifty-one per cent felt that too much of their time was wasted by salesmen. "It's great to be friendly, but I know of no way to make a buyer more ill at ease than to discuss a hundred and one things that do not pertain to his work . . ." We cannot afford to offend a salesman and will sincerely appreciate his realizing the buyer's position before the buyer runs out of patience."

Forty-three per cent rate a salesman's integrity, honesty and truthfulness in buying from him. "The purchasing agent must believe the salesman's approach. Time will prove most salesmen's stories. Honesty is the short cut to the establishment of confidence. Buying on price alone can be inviting failure . . . High pressure salesmen or inaccurate information are most likely to lead the new buyer into placing a bad order."

Thirty-seven per cent report that follow-through is a favorable trait in a salesman. "A purchasing agent wants dependable service and doesn't expect to have to spend time rechecking for promised deliveries. If you have committed yourself to return a quotation or obtain samples for a specific purpose, make every effort to follow-through.

Twenty-nine per cent list, as an important attribute, a pleasant manner on the salesman's part. "The salesman should be a good listener as well as one who can talk in a manner that will interest his customer and help the buyer to remember that salesman and his product."

Twenty-three per cent want service from the salesman. "One cannot forget three basic buying principles: (1) quality; (2) service and delivery; (3) price.

"The one factor that the salesman can contribute most to, from a personal angle, is service. We are constantly plagued by crash programs and rush orders which cause the buyer to ask for seemingly impossible requirements.

Rather than continually to give the salesman the needle, we should give him our all out support. For example the purchasing agents in our company have found that there are ways to help his supplier help us. Whenever possible, they suggest ways in which a supplier can improve his product or cut his costs, or devise new products we can use to better advantage than the ones we now use.

It can easily be a two-way street. One cannot estimate the value of service. I presume our buyers like to take this for granted and that is why it is not higher on the list of important qualifications."

Electrical Facilities Now Knopp Inc.

OAKLAND, CALIF. — Electrical Facilities Inc., manufacturers of precision transformers, testing equipment and rectifiers, has changed its name to Knopp Inc.

Under the name of Knopp Inc., the firm will continue to make the same products. The company was founded in 1928 by the late Otto A. Knopp, a utility engineer. His son, Harold P. Knopp, associated with the company since 1932, has been president since 1952, and will continue to serve Knopp Inc., in the same capacity.

there's big demand for National Electric

WIREWĀ

and here's why...

It's an all-purpose raceway that contractors like because...

It goes in fast and economically

1. Hinge-type coupling permits most economic installation . . . flush to wall, in corners, bracketed out or suspended. **2.** Flangeless sections permit speedy assembly. **3.** Multiple knockouts on two sides for convenient branch circuiting. **4.** Hinged covers are designed for quick access at all points.

It's versatile, rugged, attractive in appearance

1. Any wiring combination possible within National Electrical Code. **2.** Splicing within the raceway approved by the National Electrical Code. **3.** Large cross sectional area provides wiring capacity to permit many branch take-offs. **4.** Die formed from rugged 16-gage steel . . . 100% salvable. **5.** Attractive satin grey baked enamel finish also serves as excellent prime coat for over-painting in installations using color dynamics.

1,600 ft. of Wirewā was installed in Westinghouse KDKA-TV, Pittsburgh, Pa.

NE Wirewā is available in both 4" x 4" and 6" x 6" sizes. Investigate the advantages of placing stock orders now!

National Electric Products

PITTSBURGH, PA.

3 Plants • 10 Warehouses • 36 Sales Offices

NATIONAL ELECTRIC PRODUCTS CORP. PITTSBURGH, PA. 50TH ANNIVERSARY 1905–1955

No. 504 . . . easy to set-up . . . fast to use . . . precision made . . . gives perfect threads every time.

No. 4P geared die stock gives perfect threads on 2½" to 4" pipe with four sets (5 each) of dies.

No. 65R for perfect threading by hand or with power . . . for use on 1" to 2" pipe . . . jam-proof . . . kicks out automatically when standard length thread is cut.

Small Ratchet threaders capacity from ⅛"-2".

RIGID PIPE THREADERS

Today, the craftsman is demanding more from the tools he uses. He buys tools based on performance . . . accuracy . . . dependability . . . and long service life. That's why RIGID Tools are number *ONE* in demand. They are designed and produced by men who have experience . . . who have devoted their lives to the manufacture of the finest line of pipe tools available.

SPECIFY THE RIGID "502" . . .
for use on any power drive. Single set of self-contained dies adjusts quickly to ½" and ¾" pipe . . . regardless of position of quick opening lever.

SPECIFY THE RIGID "504" . . .
for use on any power drive. One set of full width dies adjusts to 1", 1¼", 1½" or 2". Quick-opening dies retract immediately while power drive is operating . . . eliminates slow back-off. Four-jaw work-holder sets to size instantly . . . no lead screw jam.

CONDUIT THREADERS AVAILABLE

RIGID
WORK-SAVER PIPE TOOLS

MANUFACTURED BY THE RIDGE TOOL COMPANY • 459 Clark Street, Elyria, Ohio

PEOPLE IN THE NEWS

James J. McDonald has been promoted to sales manager, electrical products, maintenance and contractor trades, Minnesota Mining & Manufacturing Co. **Albert J. Forss** has been promoted to sales manager, electrical products, industrial trades.

Frank J. McGuinn has been promoted to division sales manager, electrical products in the New York branch of the Minnesota Mining & Manufacturing Co. Since 1954 he has been sales manager of insulation products of the Irvington Varnish & Insulator division.

George Wassa is with the W. H. "Jack" McAdams Co., Southwestern sales agents, Dallas, Tex. The company completed its first year of operation on April 1, 1955.

Cyril J. White, president of the Tork Clock Co., Inc., has announced two promotions. **Henry F. Zuba** has been named a vice president. **Dorset J. White** has been named director of sales.

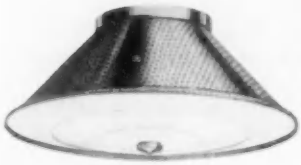
Walter H. Bieringer, vice president, Plymouth Rubber Co., Canton, Mass., has been appointed consultant to the State Department on refugee affairs.

Harry L. Buck has been elected a vice president and general manager of the I-T-E Circuit Breaker Co. **William M. Gwynn** was elected treasurer succeeding Mr. Buck. **Franklyn S. Aud-**

TRIANGLE ROUND ROBIN Golf Tournament was held recently at the Grossinger Country Club, Grossinger, N. Y. The annual tournament, sponsored by Triangle Conduit & Cable Co., features outstanding professional women golfers. From left to right are Paul Grossinger, Louise Suggs and John E. McAuliffe, Triangle president and sponsor of the game.

Now's the time to get set for MOE Light's big fall promotion...

M-1096—$24.95*



M-4061—$ 9.95*

M-1057—$14.75*

*Prices slightly higher Denver and West.

reaching 37,276,416 readers coast-to-coast

RIGHT TIME FOR SURE... because when this big, impressive Moe Light Promotion on *Inspiration-Lighting* breaks (and first issues will hit newsstands in October) there'll be thousands of families right in your community looking for the *Home Lighting Centers* that display Moe Lights.

IT'S SMART SALES STRATEGY... to make sure your dealers are ready with bright and orderly displays—plenty of stock on hand. Good idea, too, to tell every dealer about the national advertising support in store for them.

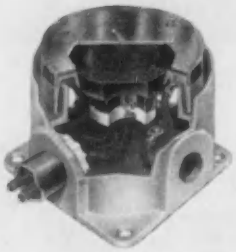
PROMOTIONS LIKE THIS... are but one of many things Moe Light is doing to increase sales for you and your dealers. Remember—as Moe Light's business partner, this big Fall Promotion belongs to you. Make it work with your dealers AND IT WILL PAY-OFF FOR *YOU!*

MOE Light® Originators of Inspiration-Lighting

Division of **THOMAS INDUSTRIES INC.**
General Offices, 410 South Third St., Louisville, Kentucky
In Canada: 1401 The Queensway, Toronto 14, Ontario

Latrobe *Electrical* Products

Non-adjustable Floor Box



Adjustable Floor Box

Adjustable Gang Box

Dependable Performers

For long, smooth service "Latrobe" Floor Boxes and Wiring Specialties are tops. Years of performance have proved that. And, "Latrobe" Boxes are designed in a way that permits fast, easy installation—cutting labor costs to the bone.

Insulator Supports

"Bull Dog" Insulator Supports are malleable for fastening porcelain and glass insulators to exposed steel framework. Made in four sizes to accommodate all standard insulators.

Other "Latrobe" Products

Non-Adjustable Floor Boxes
Adjustable Floor Boxes
Gang Boxes . . . Cover Plates
Junction Boxes . . . Nozzles
Pipe or Conduit Hangers
Insulator Supports
Cable Supports . . . Fish Wire
Staple and Cable Clips

Write for new catalog

Fullman Manufacturing Co.
1209-1215 JEFFERSON STREET
LATROBE, PA.

son was elected secretary, succeeding **Edwin L. Atlee, Jr.**, who is retiring but who will continue as a director. **Roy E. Murphy**, vice president in charge of sales, is also retiring.

David A. Hamilton has been named manager of agent, distributor and user sales in G.E.'s small integral motor department. He had been district power apparatus specialist in Indianapolis with Gesco in 1947.

Lloyd J. Mande is a field engineer at the Syracuse district office for Bull-Dog Electric Products Co., Detroit. He works under the direct supervision of **W. L. Corbet**, Syracuse district manager.

Michael B. DeMeo has been assigned the New England area as a salesman for National Electric Products Corp. Mr. DeMeo has been office and warehouse manager at the Cambridge, Mass., office for the past six years.

OBITUARIES

Ernest Ernesty

Ernest Ernesty, 51, owner of the State Electric Co., Pittsburgh, Pa., died on June 28th, in the penthouse apartment above his establishment at 910 Penn Ave.

Mr. Ernesty founded State Electric 20 years ago. He was a member of the Electric League of Western Pennsylvania, the Pittsburgh Housewares Club and the NAED.

F. M. Shepard

Frederick M. Shepard, veteran Southeastern district manager for The Thomas & Betts Co., died recently in an automobile accident in Atlanta, Ga.

He started as a sales assistant in Elizabeth, N. J., twenty years ago and later became one of the New York representatives. He had been district manager at Atlanta since 1942.

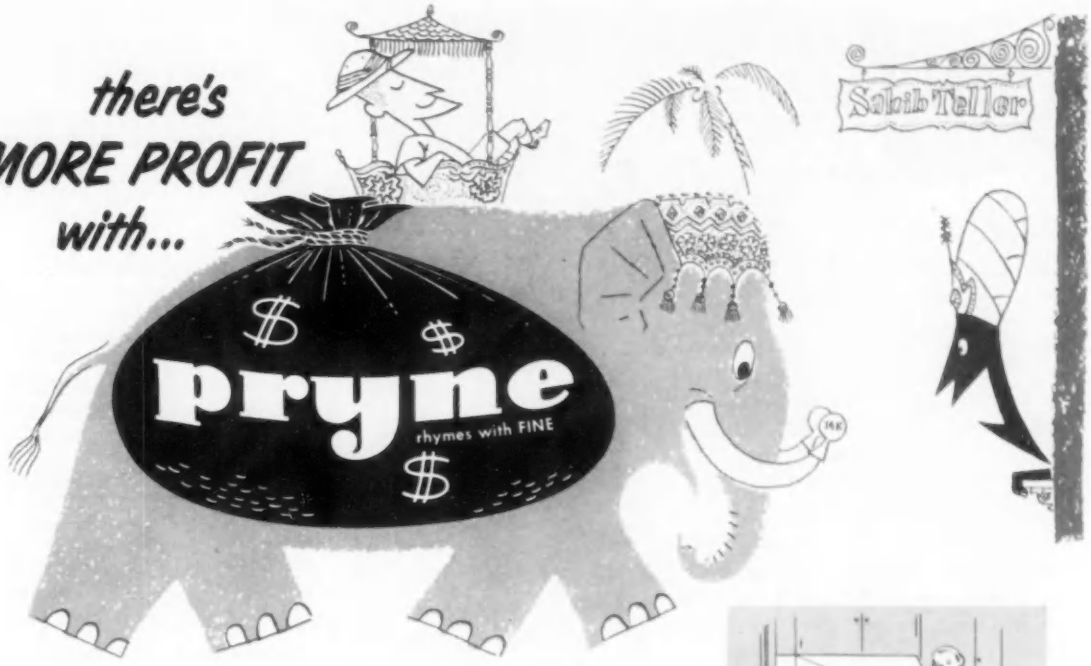
Capt. R.O.D. Sullivan

Capt. R. O. D. Sullivan, president of Capt. R. O. D. Sullivan, Inc., wholesale electrical distributors, Sanford, N. C., died on July 10th of a heart attack. He was 62 years old.

Captain Sullivan founded his firm in 1944. He was a member of the NAED as well as the Southeastern Electrical Wholesalers Assn.

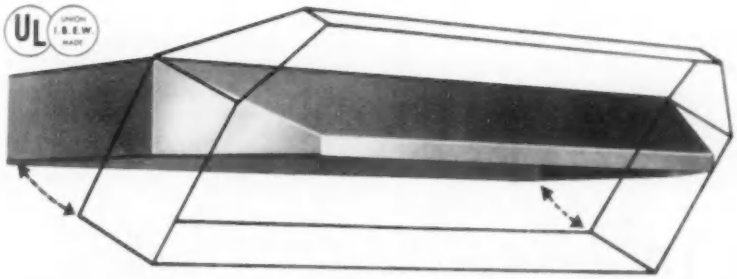
R. O. D. Sullivan was the pilot of a Pan American Airways plane that crashed in Lisbon Bay in 1942. He retired from Pan American following

there's MORE PROFIT with...



Contractors from Bombay to Brooklyn know that Pryne equipment means money in the bank! Engineered for quick, easy installation to save man-hours... quality-built to eliminate costly call-backs... five year guarantee!

And Pryne products are backed by big-gun national consumer advertising... like the new Pryne Tilting Hood, publicized to 7 million homes with "Show House" ads and featured on the June *front cover* of Living for Young Homemakers! For jumbo-sized profits—specify Pryne!



another pryne "first"-new TILTING HOOD with recessed light and fan

- Exclusive! A flick of the fingers and the hood *tilts* for easy cleaning or removal for access to fan and light!
- Exclusive! Angled corners allow cabinet doors to open wide on either side!
- Exclusive! No inside projections to catch dirt, dust, grease.
- 3 beautiful easy-to-clean finishes including Coppertone.
- Choice of models for installation with new or existing cabinets:

  #500—with space-saving self-contained Blo-fan and Pry-lite

  #400—needs only 4" of space for light and fan housing

  #300—Low-cost builders special with Aerofan and Pry-lite

pryne *rhymes with FINE*

PRYNE & CO., INC. ETB
BOX 698, POMONA, CALIF.

I'd like more information about the new Pryne tilting hood.

Name _____
Company _____
Street _____
City _____ Zone ____ State _____

NEW STEBER LIGHTING UNITS CUT INSTALLATION TIME AND COSTS

The Steber line, containing hundreds of lighting units and fittings, gives you a complete selection of durable, low cost matched units that simplify and speed every installation. Their greater adaptability assures specified lighting results as well as better appearance and lifelong satisfaction. Lighting units are fully wired with ample leads.

STEBER FITTINGS

Versatile Steberlite fittings make all jobs easier, more economical, cut wiring time and installation costs. Lifetime cast aluminum units are available for single or clusters of up to 8 Steberlites. Each unit is designed to do a specific job better and fit perfectly with all Steber fittings and Steberlite units.

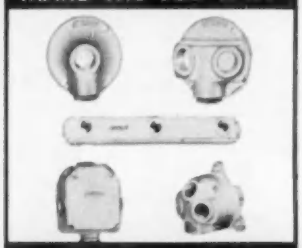
STEBERLITES

Steberlites are available now in a wide choice of styles to meet your specifications exactly. No. S300 medium base and S350 mogul base provide universal adjustment for casting light in any direction. These units use medium or mogul base PAR-38 and R-40 sealed beam lamps. S400 accommodates PAR-56 Flood or Spot lamps. S500 is a chrome plated medium base Steberlite, using PAR-38 and R-40 sealed beam lamps.

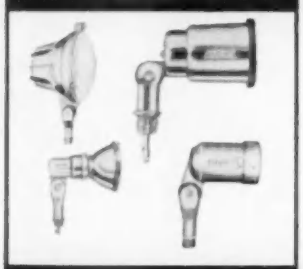
STEBER FLOODLIGHTS

Steber Floodlights are ideal for lighting parking lots, construction projects, shipping and receiving docks, service stations, railroad yards, sports areas and wherever economical high intensity is required. Available for 100 to 1500 watt lamps with or without lens. Full choice of styles and mounting bracket assemblies. *Sold through leading wholesalers*

MATCHED UNITS MAKE THE JOB EASY

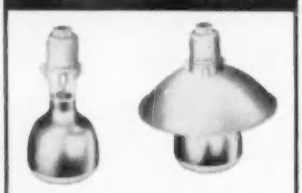


STEBERLITES



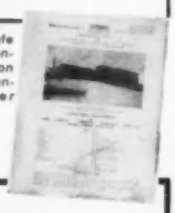
FLOODLIGHTS

HIGH BAY UNITS



All aluminum construction prevents damage caused by corrosive atmospheres.

Write for complete Catalog TDS-9 containing information and prices on hundreds of Steber items!



STEBER

STEBER MANUFACTURING CO.
Dept. 71
Broadview (Maywood P.O.), Illinois

STEBER MANUFACTURING CO. OF CALIFORNIA
242 S. Anderson St.
Los Angeles 33, California

STEBER-WOODHOUSE, LTD.
2368 Dundas St. West
Toronto, Canada

the accident. A month previous to the crash, Capt. Sullivan had set a record as the first man to fly the Atlantic Ocean 100 times.

In the plane crash Capt. Sullivan suffered a broken neck. Twenty of the 39 persons abroad were killed. He said he never knew what caused the crash. He described his approach as "normal and routine" when the plane bearing USO entertainers smashed into the water. Among the entertainers were Jane Froman, who was crippled, and accordian player Gypsy Markoff who was killed.

At the time of the Lisbon crash Capt. Sullivan was a senior pilot with Pan American.

SALES REPRESENTATIVES

Ender-Monarch Corp., has announced the appointment of Charles Poey, 144-84 41st Ave., Flushing, N.Y., as their agent in Pennsylvania, Maryland and Washington, D.C.

Alpha Wire Corp., New York, N. Y., has appointed the Leonard L. Minthorne Co., 7521 N. E. Glisan Ave., Portland 16, Ore., as representative for Washington, Oregon and western Idaho.

Murray Manufacturing Corp., Brooklyn, N.Y., has announced the appointment of two Southern sales agents. Edgar Jones and Robert Philibert of Jones-Philibert and Co., 358 Sauve Rd., New Orleans, La., will represent the company in Louisiana, Mississippi and Arkansas. John F. Townes of Townes and Co., 318 9th Ave., South, Nashville, Tenn., has been appointed warehousing representative as well as sales agent for Tennessee.

Accurate Manufacturing Co., Garfield, N. J., has announced the appointment of Fleming & Co., 3201 Main St., Kansas City, Mo., as manufacturers representative. The company will represent Accurate in Kansas, Nebraska, and western Missouri. Members of Fleming & Co. covering this territory are B. S. Fleming, Sr., B. S. Fleming, Jr., and J. W. Walters.

The Standard Transformer Co., Warren, Ohio, has appointed the Gulf Sales Agency as exclusive sales agent in the states of Louisiana, Mississippi, Arkansas and western Tennessee. The Gulf Sales Agency maintains sales offices at 500 Magazine St., New Orleans; 731 Wingfield St., Jackson, Miss.; and 6708 Kenwood Rd., Little Rock, Ark.

ASSOCIATION NEWS

DETROIT—The Electrical Association of Detroit will sponsor a Certified Lighting Program commencing in the fall. The Commercial-Industrial Lighting Committee of the association is preparing to start sales and technical training classes in early September.

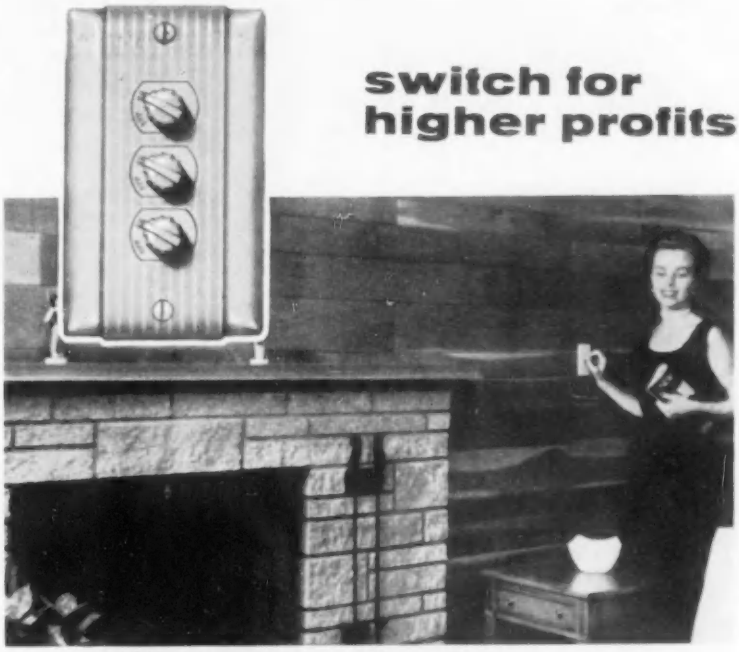
NEW LITERATURE

Wires, Cables—Illustrated 90-page booklet describes the line of electrical wires and cables manufactured for the railroad industry. Major sections are devoted to insulation compounds, jacket compounds, signal cables, communication cables and power and control cables. Also included is a section on electrical tables and splicing compounds and several charts of information on messengers for aerial cables. The booklet is available from the electrical wire and cable dept., United States Rubber Co., 1230 Avenue of the Americas, New York 20, N.Y.

Lighting—Communication and learning as related to classroom lighting are described in a 40-page booklet by Dr. Darell B. Harmon, consulting educationist of Austin, Tex. The booklet describes experiences from which communication and learning are derived in schools, and presents facts about lighting development and its application to problems in vision, posture and learning presented earlier. Booklet may be obtained from the Wakefield Co., Vermilion, Ohio.

Motor Control—The subject of a new bulletin, GEA-6331, is the "Limitamp" high-voltage motor control. The two-color publication outlines in detail features of the high-voltage, current-limiting, fused starters for co-ordinated control of squirrel-cage, synchronous, wound-rotor, and multi-speeds motors. Simplified installation and reduced space requirements are covered in the 12-page bulletin. It is available from the General Electric Co., Schenectady 5, N. Y.

Service Entrance—A two-color, 16-page booklet describing G.E.'s new line of fusible service entrance equipment is designated GEA-6286. The booklet explains the features of seven basic types of fusible service entrance devices for home, farm, commercial and light industrial applications. It describes accessories, such as interchangeable raintight box hubs, and



ROTO-GLO® quiet switch

BECAUSE SWITCHES SHOULD BE SEEN . . . NOT HEARD!

ROTO-GLO Quiet Switches are easier to sell than old fashioned switches because they have popular, money saving advantages that are of interest to your customers. They are easier to install and the quality construction eliminates expensive call backs. Just check these built-in consumer and trade appeal features:

The trade likes them because modern screwless terminals cut installation time and costs. And the totally enclosed plastic body and non-oxidizing silver alloy contacts assure years of trouble-free performance.

Consumers like the whisper quiet operation . . . the simple ROTO action that turns lights off and on like a modern radio or TV dial . . . the luminous knobs that GLOW IN THE DARK . . . and the clean functional design.

ROTO-GLO switches are available in P&S Despard type (15A, 120V AC, 277V AC) for modern combination wiring, or in conventional Strap type (15A, 120V AC) to fill the demand for quiet switches in the replacement market and for new work.

Get this sales building kit!

Here is an attractive working kit that makes selling ROTO-GLO's a cinch. Compact, lightweight, easy to carry.

THE CASE IS FREE

Write for complete ROTO-GLO details to Dept. RG-31

P&S® PASS & SEYMOUR, INC.

71 Murray St., New York 7, N. Y. Syracuse 9, N. Y. 1229 W. Washington Blvd., Chicago 7, Ill.

SMALL SIZE! LOUD RING!

By the ORIGINATORS of UNDERDOME Bells

Greater sound carrying power combined with clear, distinctive tone is created by the "Slow Stroke" action plus the prolonged vibration of the bell shell. This effect has been proven to be greatly superior to the buzzer like action of ordinary bells. Only one moving part (the plunger) minimizes wear. Polarized . . . no contacts to spark, arc, stick or wear. 2½" or 3" diameters, for operation on standard A.C. voltages; with adapter plate for mounting on standard outlet boxes. Also available in a variety of mounting arrangements and finishes for use as components on original equipment.

Write for literature MB-5
Sold through Electrical Wholesalers

Open back models designed for simple bracket mounting on strap or chassis.

Enclosed back with adapter plate suitable for direct mounting on a 4" round or octagonal box.

Enclosed back with terminal block for screw connections.

Wheelock SIGNALS SIGNAL ENGINEERING & MFG. CO. LONG BRANCH, NEW JERSEY

contains information on G.E. merchandising aids for use by electrical contactors. The booklet may be had from the General Electric Co., Trumbull Components Dept., Plainville, Conn.

Christmas Decorations—Full-color 1955 catalog of dimensional, illuminated home and display Christmas decorations has just been published. Illustrated in color are a giant display Santa, as well as a Santa Sleigh and reindeer, snowman, angels, candles. Catalog is available from the L. A. Goodman Mfg. Co., 131 W. 63rd St., Chicago 21, Ill.

Lighting—"Lighting Fixture Guide" is a 40-page, illustrated booklet designed to aid in the selection of the right lighting fixture for the right place in the home. The guide is expected to be of special value to fixture distributors in stocking, displaying and selling. For each part of the house the booklet gives lumen and recipe information for lighting an area or a seeing need; shows a variety of fixture types available to fill each recipe; and illustrates widely used styles within which to conform correlated ensembles of fixtures. The book carries a

There are PLUS VALUES for YOU in the PAINE line of Hanging and Fastening Devices:

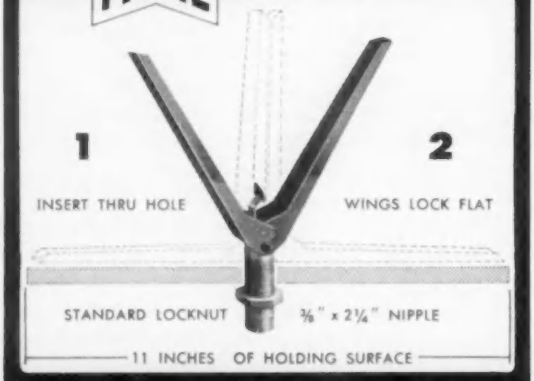
ONE SOURCE. Saves you time, inventory and freight costs.

TOP QUALITY and job-right design make satisfied users.

GOOD PACKAGING — Strong, colorful cartons, clearly labelled.

CUSTOMER DEMAND stimulated with attention-getting ads like this ➤

Hang Fixtures Faster and Easier with the PAINE Outlet Box and FIXTURE HANGER



One of the easiest to install and most serviceable hangers ever designed. Solves the problem of hanging fixtures and outlet boxes to ceiling or wall surfaces where you can't reach the other side. Simply insert thru hole — as small as 1⅛" in diameter — and wings drop flat, locked in place by a patented key. To release wings for removing hanger at any time, just raise key with screw driver inserted thru nipple. Try these hangers once and you'll use them again and again.

Write for Catalog of Paine's complete line.

the best craftsmen always take PAINE'S

THE PAINE COMPANY, 3 Westgate Road, Addison, Illinois

POWERCRAFT
STOCKS FOR IMMEDIATE SHIPMENT
PRIMARY BUS SUPPORTS

● Contractors, Industrials, and Utilities rely on the accuracy of these Bus Supports to meet exacting service conditions. Available for Indoor and Outdoor Service—flat or pipe mounting. Conform to NEMA standards. POWERCRAFT invites your inquiries on any special Bus Support requirement. Other POWERCRAFT Products . . . Indoor and Outdoor Disconnecting Switches, Bus Clamps, Power Connectors, Pipe Frame Fittings for 1¼" I. P. S. Pipe, and Clamp Insulator Supports. Send for new catalog.

POWERCRAFT CORPORATION
2215 De Kalb St. Phone
St. Louis 4, Mo. Prospect 6-4532
Since 1932

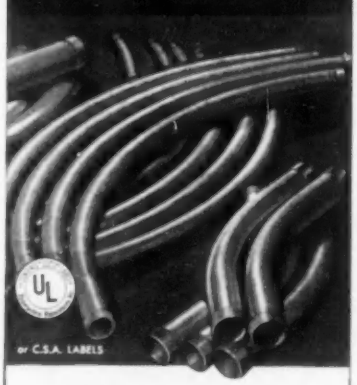
price of fifty cents and is published by General Electric Co., Nela Park, Cleveland 12, Ohio.

Nut Drivers—Color catalog, designated SD-75, covers the complete line of hollow shaft nut drivers. Products are illustrated in color, including Vari Board and shelf assortments. Each nut driver size is color keyed. The catalog may be obtained from Vaco Products Co., Chicago 11, Ill.

Lighting — Incandescent recessed lighting fixtures are the subject of a 150-page catalog printed in four colors. It is designed especially for architects and engineers. The cover is actually a ceiling trim frame from one of the company's standard recessed fixtures. Complete information may be obtained from Marvin Manufacturing Co., Los Angeles, Calif.

Tape—A two-color catalog describes the manufacturer's complete line of rubber, friction and plastic electrical tapes. Complete specifications and ordering information is included. Of interest, too, are results of laboratory tests of various tapes. The catalog is published by the Accurate Manufacturing Co., Garfield, N. J.

CONDUIT



• ELBOWS – *Large Radius, Standard Radius, E M T*

PIPE NIPPLES
COUPLINGS
RUNNING THREAD PIPE
WALL PLATES • GOOSENECKS

Write for Catalog

CONDUIT NIPPLE MFG. CO.

1455 Spring Garden Ave. PITTSBURGH 12, PA.

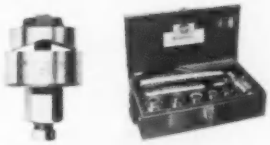
better profits, faster with well-known GREENLEE timesavers for electricians

new lightweight hydraulic pipe and conduit bender

Cash in on the big, growing demand for this *all new* GREENLEE Bender that quickly, accurately bends ½" to 2" conduit. *Easy portability . . . extra versatility . . . extra power* . . . and makes a *full 90° bend with one stroke of the ram!* Separate two-speed hydraulic hand pump and bending ram simplify one-man handling and setup. Easily operated by hand, or may be teamed with a GREENLEE power pump for fast production jobs. Attachments also available for bending thin-wall conduit, tubing, bus bars. Write for complete data and pricing on this fast-selling tool.

HAND BENDERS FOR TUBING

Swiftly produce accurate, small-radius bends (up to 180°) in conduit, pipe, and tubing. No flattening or kinks. GREENLEE Hand Benders are especially designed to form neat bends to fit sharp corners, nooks, and other close quarters. Eliminate need for many manufactured bends and fittings. Various sizes and models.



KNOCKOUT PUNCHES AND HYDRAULIC PUNCH DRIVER

Quick, easy way to make knockout enlargements for ¾" to 4" conduit. Simply insert GREENLEE Knockout Punch in knockout or small drilled hole, then turn with an ordinary wrench. For an even faster, practically effortless operation, drive Punch with powerful, portable GREENLEE Hydraulic Driver.

CABLE PULLER

Easy-operating, compact unit for 7,500-pound pull. Fastens directly to conduit for pulling in line with conduit . . . no loosened hangers. Specifically designed to save work, speed jobs. Attachment available for concealed conduit work.

BORING TOOLS

For quickly making clean, smooth openings for conduit and wiring. The GREENLEE line includes Electricians' Auger Bits and Electric-Drill Bits, Bell Hangers' Drills, Expansive Bits, Joist Borers, Ship Augers, and Bit Extensions.

GREENLEE

Write for catalog on above and other GREENLEE time-saving tools including anchor screw expanders, chisels and gouges, spiral screw drivers, and many more.

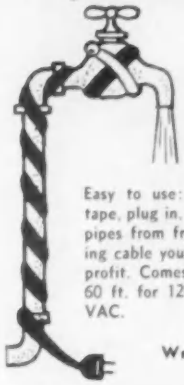
GREENLEE TOOL CO., 1848 COLUMBIA AVENUE, ROCKFORD, ILL.

SMITH-GATES ELECTRIC

LINE-O-HEAT®

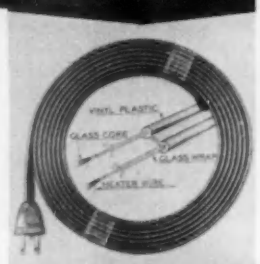
NOW GUARANTEED FOR 2 YEARS!

It's the best heating cable to keep water pipes from freezing



Line-O-Heat can take a beating and keep on heating—so dependable it carries a 2-year guarantee. Prevents damaging freeze-up of water pipes, pumps, valves, roof valleys, gutters, eaves, etc. Costs little to buy and use. Safe—fireproof, shockproof, waterproof. Easy to use: apply where needed, secure with tape, plug in. Properly installed it will keep water pipes from freezing at 50° below. It's the heating cable you can sell with confidence as well as profit. Comes in six standard lengths from 3 to 60 ft. for 120 VAC use, longer lengths for 240 VAC.

Write for FREE Catalog Listing 35 Electrical Aids



Backed By National Advertising
***FREE* Dealer Aids**

Full range of dealer aids available in addition to national advertising: leaflets, mats, window streamers, easel display pieces, etc.

SMITH-GATES CORP.
DEPT. H77, PLAINVILLE, CONN.

Simpson Electric Co., Chicago, Ill.—A new display, on which is mounted an actual sample of the "Midgetester" model 355 miniature volt-ohmmeter, is now available. The unit can be removed from the display for examination by prospective buyers, but it is connected by a small chain to prevent loss. The display board is arranged for either counter or wall use and is printed in orange and black. Size has been held to 9 by 12 inches. The back cover on the display is transparent plastic so that a prospective buyer can examine the interior of the instrument.

Viking Air Conditioning div., National-U. S. Radiator Corp., Cleveland 2, Ohio—A six-page folder entitled

JACKSON YARDLIGHTS

PORCELAIN ENAMELED

• Jackson Yardlights are impervious to wind and weather and truly last a lifetime. Made of one-piece heavy gauge steel finished in three coats of Vitreous Porcelain Enamel. Completely wired and assembled. Listed by U. L. Approved for R. E. A. installations.

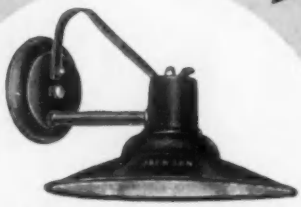
JACKSON Quality PRODUCTS

SOLD ONLY THRU WHOLESALERS

SELL — Quality, Good Appearance, Service

GET — BUSINESS WITH PROFIT

Manufacturers of
• Reflectors
• Yardlights
• Vaporproof Units
• Weatherproof Sockets



ORNAMENTAL LIGHTING BRACKET NO. 6957

Finish is black and brass. Height is 7½"—extends 14". Completely wired. Individually packed. Accommodates 100 watt bulb or PAR lamp and is for use in garages, motels, side entrances of public buildings, ranch type homes, and such places where ornamental brackets are needed.

JACKSON ELECTRICAL COMPANY
900-910 W. VAN BUREN STREET — CHICAGO 7, ILLINOIS

Millions of Steel

JIFFY CLIPS

Serving the Electrical Industry

Specify
MINERALLAC
HANGERS, CLIPS, STRAPS, BUSHINGS

Expert design, choice materials and controlled manufacture have built "top-service and longest life" into Minerallac Electrical Specialties. That's why the electrical industry "prefers Minerallac"... In steel and Everdur for hanging pipe, conduit, BX cable, etc.

Send for new literature and prices.

MINERALLAC ELECTRIC COMPANY
25 North Peoria Street—Chicago 7, Illinois

MINERALLAC

"Tips on Blowers" has been prepared as a helpful reference when installing, adjusting or servicing any make of blower. The pocket-size folder contains many brief, illustrated tips on mounting and adjusting belts and pulleys, installing a blower, adjusting the blower speed for heating or cooling, how to order replacement parts and also gives checklists of important items to include when instructing the homeowner or giving complete blower service.

BOOK REVIEWS

Making Your Sales Meeting Sell

Edward J. Hegarty
McGraw-Hill Book Co.
New York, N. Y.

The author of this book is the director of sales training, electrical appliance division, Westinghouse Electric Corp. He covers every step, from deciding what you want your meeting to accomplish, to the fine points of sending your audience away with your ideas in mind. Subjects covered include how to prepare programs, write and deliver speeches and gain audience participation. The author has had 40 years' experience as a public speaker and sales trainer.

302 pages

K&H Solderless Terminal LUGS
A SIZE and TYPE for every need!
K&H Solderless CONNECTORS

WRITE FOR CATALOG

KRUEGER & HUDEPOHL, INC.
THIRD & VINE STS., CINCINNATI 2, OHIO

NEW FOSTORIA 20th Anniversary LOCALITES

NEVER BEFORE A LIGHT LIKE THIS!

for Machine Tools, Assembly, Inspection
MODEL 66-BP-701
$8.63 Each in Std. Pkg. of 4
List $10.15 ea.

SENSATIONAL NEW FLEXIBILITY

NEW Universal Arm Joints — Bend 155°. Large frictional triple disc bearing surface. Smooth, easy movement. Instantly adjustable by hand to direct light exactly as needed.
NEW Collar Disc Joints — Rotate 180°. Combination of 155° bend joints and 180° rotating joints provides amazing articulation for positioning reflector.
NEW Reflector — Parobolic design with 6¾" orifice. Accommodates 100 watt A-21 lamp. Available with lens.
NEW Base — Universal for horizontal or vertical mounting. Outlet box base optional.
NEW Wiring — Heavy duty Levolier Socket interior in high impact plastic shell with Velumoid lamp seal. 8 ft. SPT-2 18/2 heavy duty plastic zip cord with molded plug.
NEW Finish—Semi-gloss Vista Green baked enamel. Reflector interior, high temperature White.

WRITE for Complete Catalog of Localite models for every industrial use.

UL

THE FOSTORIA PRESSED STEEL CORPORATION • Fostoria, Ohio
Localites are available through wholesalers everywhere.

LOCALITE fostoria for Light ON the Job

WRITE for this Extra Flexible CONDUIT PRICE BOOK

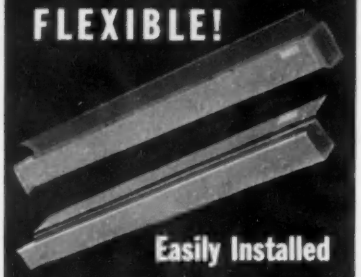
U-20 BLACK-GREY Synthetic Covered Conduit

U-10E Extra Flexible Conduit

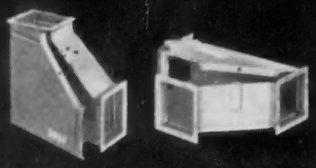
U-100FC TWIST-LOC Conduit

UNIVERSAL METAL HOSE CO.
2107 South Kedzie Avenue, Chicago 23, Illinois

QUALITY BUILT!
ECONOMICAL!
FLEXIBLE!



Easily Installed
Saves Time and Money!

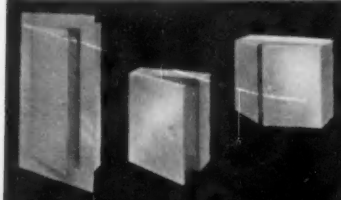


BOSS
WIREWAY
CUT OUT BOXES
CABINETS

QUALITY-BUILT
Code gauge metal, 100% UL approved construction. Firm, but easy-out knockouts. Gray baked enamel finish.

ECONOMICAL
Many years' experience, modern production methods, assure quality—reasonable prices.

FLEXIBILITY
Choice of flanged or flangeless wireway, separate slide-lock or attached hinged cover. Full line lengths, sizes, elbows, junctions, cabinets. Adaptable to any electrical distribution installation.

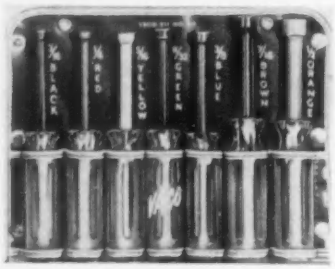


SOLD THROUGH DISTRIBUTORS ONLY
Write Today for Catalogs and Prices
THE HUENEFELD CO.
Cincinnati 25, Ohio

NEW PRODUCTS YOU CAN USE

Cable Puller

The Barth Corp., Cleveland, Ohio
Electric powered cable pullers have an increase in pulling power. The capacity of this combination tape pushing and wire pulling machine has been stepped up to handle most 2½ in. and 3 in. runs. The second improvement is a new coupling which will permit direct attachment of the puller to conduit in old type installations where the conduit is close to the back of the junction box.



Nut Drivers

Vaco Products Co., Chicago 11, Ill.

Hollow shaft nut drivers come in various colors. The shaft of each size is color-keyed. For example, ¼-in. size is in red, while yellow designates 5/16-in. size. Seven hex sizes are all color keyed.

Conduit Racks

The Frick Gallagher Mfg. Co., Wellston, Ohio
Storage of large quantities of conduit and other vertical piping material is now possible in a much smaller space using the new vertical conduit racks, according to the manufacturer. Lengths of conduit up to 10 ft. can be stored upright in these racks which eliminate the need for extra wide aisles. The racks are individual units, require no fastening to the wall or bracing.

SPECIALISTS
in
FLUX
for
SODERING
BRAZING
WELDING

AT IT SINCE '93
ALLEN

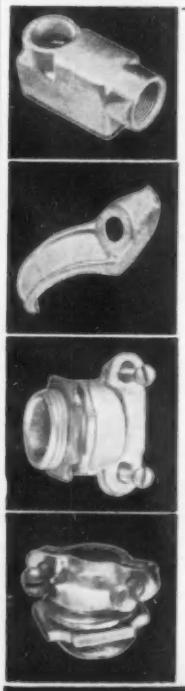
L. B. ALLEN CO., Inc.
6701 BRYN MAWR AVE.
CHICAGO 31, ILL.

Make tough jobs
easier with a
HYKON
REELIFT

HANDLES
up to
2000 lb.
reels

Makes it quick and easy to lift any size reel up to 48" diam. SAFE—won't upset. One man handles 1000 lb. reels with ease. Broken reels no problem. Requires no jacks, cranes or rolling of reels. Slip-fit on axle adjusts reel to any height. *Write for latest Catalog today.*

HyKon MANUFACTURING CO
Box 923, Mt. Union
ALLIANCE, OHIO



FOR
MODERN
QUALITY
FITTINGS
Specify
ATLANTIC

ACF

ATLANTIC CONDUIT FITTINGS
COMPANY
BOSTON, MASSACHUSETTS

CLASSIFIED SELLING OPPORTUNITIES ADVERTISING

AGENTS WANTED . LINES WANTED . POSITIONS WANTED . BUSINESS OPPORTUNITIES

—RATES—

UNDISPLAYED

$1.20 per line, minimum 3 lines. To figure advance payment count 5 average words as a line.

Box Numbers—counts as 1 line.

Discount of 10% if full payment is made in advance for 4 consecutive insertions.

DISPLAYED

The advertising rate is $11.50 per inch for all advertising appearing on other than a contract basis. Contract rates quoted on request.

An advertising inch is measured ⅞" vertically on a column—3 columns—30 inches to a page.

Send NEW ADS to ELECTRICAL WHOLESALING, 330 W. 42nd St., N. Y. 36, for September issue closing August 26th

REPLIES (Box No.): Address to office nearest you
NEW YORK: 330 W. 42nd St. (36)
CHICAGO: 520 N. Michigan Ave. (11)
SAN FRANCISCO: 68 Post St. (4)

SELLING OPPORTUNITIES OFFERED

Los Angeles experienced salesmen & officemen long established growing distributor. Top brands. Write complete experience. SW-7127, Electrical Wholesaling.

Manufacturers Representatives wanted to sell radiant heating panels for home and industry to electric wholesalers. Most territories open. Thermoray Corp., South Buckhout St., Irvington, New York.

Qualified aggressive representatives wanted by established signal equipment manufacturer. Territories—Up-State N.Y., Kans-Nebr.-West Mo., Md.-D. C., Va.-Carolinas. Others possible. High commission offered. RW-6986, Electrical Wholesaling.

Well established commercial lighting manufacturer requires representation in the following territories: (1) Houston, (2) Iowa and Nebraska, (3) Pennsylvania. Familiarity with architect-engineer, contractor and wholesaling trades is essential. Send complete resume of experience. Replies will be held in confidence. Address box RW-7168, Electrical Wholesaling.

SELLING OPPORTUNITY WANTED

Lines Wanted—experienced electrical sales executive, 45, with engineer degree planning new Florida agency. Interested in few quality lines. SA-6950, Electrical Wholesaling.

FREE LITERATURE

Personnel Managers—Need experienced engineers and technicians? We offer a booklet especially prepared to help you solve this problem. Write for your "free" copy of "Reservoir of Engineers and Technical Men." Searchlight Dept., Electrical Wholesaling, 330 W. 42 St., New York 36, N. Y.

MANUFACTURER'S REPRESENTATIVES WANTED

We are seeking representation for a complete line of competitively priced fluorescent and slimline lighting equipment for commercial, industrial and institutional use. Industrial units bear the RLM label.

Representatives must be familiar with the electrical wholesalers in their area and are calling on architects, engineers and contractors for promotional work. Commission basis. Territories open are: Northern Illinois including Metropolitan Chicago, Nebraska, Kansas, Louisiana, Texas, Florida, Iowa and Tennessee.

For details, write to:

RW6975, Electrical Wholesaling.
330 W. 42 St. New York 36, N. Y.

SALES REPRESENTATIVE WANTED

Leading manufacturer of complete line commercial and industrial lighting equipment has territory open in Milwaukee and Northern Wisconsin. Excellent business opportunity for top calibre salesman presently calling on architects, engineers, electrical distributors and contractors. Send complete resume to: Sales Manager, The Miller Company, Meriden, Connecticut. All replies strictly confidential.

SALES REPRESENTATIVE WANTED

Leading manufacturer of complete line commercial and industrial lighting equipment has territories open in Louisiana, South Carolina and Virginia. Excellent business opportunity for top caliber salesmen presently calling on architects, engineers, electrical distributors and contractors. Send complete resume. All replies strictly confidential. Write:

RW-7163, Electrical Wholesaling
330 W. 42 St. New York 36, N.Y.

MANUFACTURER'S REPRESENTATIVE WANTED

by Fluorescent Lighting Fixture Manufacturer who is long established, well rated, nationally known with a complete line of fluorescent lighting fixtures consisting of: Commercials, Industrial, Institutional and Residential fixtures; Outdoor fluorescent post and wall lites, mercury vapor luminaires, pexi-glass bottom units, germicidal units, show case lighting and specialty units.

All fixtures are union made, Underwriters Laboratory approved, Fleur-O-Lier certified and guaranteed for two years. We are licensees for various lens concerns. Prices are competitive and deliveries are prompt.

The type of representatives we are seeking must be familiar with the Electrical Wholesaler in his area and do field work with Electrical Contractors, Electrical Engineers and Architects for specification work.

Some choice territories available. All replies strictly confidential. Warehousing facilities will be given consideration.

Write or phone giving compete resume, lines carried, education, experience, references, etc.

Great Northern Manufacturing Corporation

1056 North Wood Street
Chicago 22, Illinois
Telephone—BElmont 5-0600

OPPORTUNITY for MANUFACTURERS

Manufacturers representative with an experienced, aggressive organization with proven sales record in Western Mo., Kansas and Nebraska seeking additional quality lines—lighting fixtures excluded.

E. L. POLSINELLI CO.
210 W. 8th St. Kansas City 5, Mo.

Milwaukee agency, covering eastern Wisconsin and upper Michigan since 1926.

Desires added lines because of new office opening in Appleton. Motors, generators, transformers, cable, wire and conduit lines desired. Warehousing facilities in Milwaukee. Men working out of each office.

RA-7223, Electrical Wholesaling
520 No. Michigan Ave. Chicago 11, Ill.

ROBOT OPERATORS
OPEN - CLOSE - LOCK DOORS, GATES
...Electronically

COMMERCIAL, INDUSTRIAL
RESIDENTIAL & SPECIAL
Write for Catalog
ROBOT APPLIANCES, INC.
13165 PROSPECT • DEARBORN, MICH.

MANUFACTURERS!

You will receive better results from your "Representative Wanted advertising" if you will state in your copy what territory or territories are available.

Manufacturer's Representatives Wanted

with established following among Electrical and Lighting Fixture Wholesalers by nationally known firm. Line of electrical specialties, fittings, lighting fixture and lamp parts. For New England—Phila., Eastern Penna., So. N.J., Del.—Western Penna., West Va.—Ohio, Ind., Ky.—St. Louis, East. Mo., So. Ill., East. Ark.—Va., N. & S. Carolina, Ga., Ala., Tenn., Miss., La., Texas—Col., Wyo., Mont., Idaho, Utah, Ariz., N. Mex., Cal., Nev., Hawaii, Canada, and foreign countries. Catalog available. Priced right—Immediate deliveries—Liberal commission. Reply in detail.

RW-7253 Electrical Wholesaling
330 W. 42 St. New York 36, N. Y.

SALES REPRESENTATIVE WANTED

A leading manufacturer of lighting equipment is expanding its field force and sales positions or agency contracts are open in the following territories:
Northern Texas and Northwestern Louisiana
Headquarters—Dallas or Fort Worth
Oklahoma and Northwestern Texas
Headquarters—Oklahoma City

Send resume to:
The Miller Company, Meriden, Connecticut

YOUR MOST DEPENDABLE SOURCE OF BOXES & FITTINGS . . .

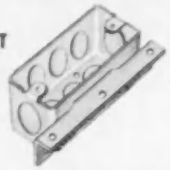
Arrolet

Preferred by more contractors today, because ARROLET's products answer modern installation problems, saving time and costs.

HANDY BOX with MOUNTING BRACKET

1 7/8" deep.—Made with new type angle bracket for quick, accurate installations.

Cat. No. HB-10-BA



3 1/4" ROUND BOX

3/4" deep.—With or without stud for use in ceiling or wall construction where very shallow box is needed.

Cat. No. 11-S

NON-GANGABLE SWITCH BOX

1 1/2" deep.—For thin wall or concrete block construction. Available with 1/2" K.O.'s for use with conduit. May be nailed on or can be had with several types of brackets.

Cat. No. 200

ARROVAL FITTINGS

Oval type, threaded, for standard rigid conduit. In 1/2", 3/4" and 1". Covers and gaskets available in various sizes and types.

ARROLET products are available in an unlimited number of combinations, types, sizes and wiring capacities to fit any job specification.

When you have an installation problem not covered by our standard line, our engineers will design special units to your specifications.

Write for Our New Catalog.

Arrolet CORPORATION

MONTGOMERY PENNA.

Sales Representatives & *Warehouse Stocks

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(Classified Advertising)

F. J. Eberle, Ass't. Mgr.

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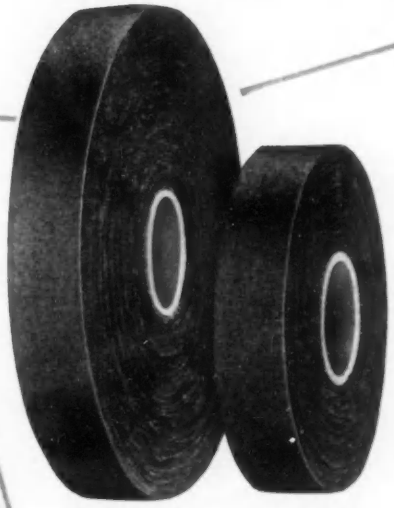
A New Money Saver in Tape!

ANOTHER FIRST IN AMERICA BY PLYMOUTH



#16 KING SIZE SLIPKNOT A WHOPPING 120-FOOT ROLL!!

#8 REGULAR SLIPKNOT A 60-FOOT ROLL

SLIPKNOT KING SIZE

FRICTION TAPE

BLACK 3/4 INCH

120 FEET

The best buy in tapes! . . . . **KING SIZE** costs much less per foot!

Greater convenience! . . . . **KING SIZE** lasts longer on the job!

Easier to handle! . . . . . **KING SIZE** cuts down shelf space, reduces inventory!

More profitable! . . . . . **KING SIZE** roll sales mean more than twice the profit of standard rolls!

Top quality! . . . . . **KING SIZE** is the same superior tape which is the largest seller the world over!

SOLD EXCLUSIVELY THROUGH RECOGNIZED WHOLESALERS

FOR KING SIZE PROFITS . . .
ORDER KING SIZE SLIPKNOT TAPE NOW!

PLYMOUTH RUBBER COMPANY, INC., CANTON, MASS., U.S.A.

"We Cut Motor Repairs For One of Our Customers from 18 Motors per Year to 2 — *by installing Fusetron Fuses*"

"The owner of a large poultry farm is one of our customers. He uses a great number of motors for pumps, feed grinders, heating systems, etc.

"But these motors were giving him so much trouble that we were rewinding 12 to 24 burned out motors a year.

"We suggested protecting the motors with Fusetron dual-element fuses. He okayed it.

"For the entire year following their application, only 2 motors were repaired and this trouble was caused by over lubrication.

"The motors we rewind are guaranteed for a year so we want to be sure they are properly protected. That's why we recommend to all our customers that they use Fusetron fuses."

Lawson E. Cobb. President
New England Electric Motor Exchange, Inc.
Gardner, Mass.

Fusetron fuses do more than protect motors against burnouts. They abolish needless blows, permit use of proper size switches and panels — they cut maintenance costs.

And Fusetron fuses give you greater safety.

Their 100,000 amp. interrupting rating is adequate for today's network system capacities — and safe to meet future circuit growth . . . *Write for bulletin* FIS.

FOR LOADS ABOVE 600 AND UP TO 5000 AMPS. USE BUSS Hi-Cap FUSES!

On 600 volts or less, they have unlimited interrupting capacity to handle any fault current. When coordinated with Fusetron fuses they will not open ahead of the fuse nearest fault . . . *Write for bulletin HCS.*

PLAY SAFE! INSTALL FUSETRON FUSES AND BUSS Hi-Cap FUSES THROUGHOUT ENTIRE ELECTRICAL SYSTEM!

FUSETRON — BUSS

Bussmann Mfg. Co. (*Division of McGraw Electric Co.*)
University at Jefferson, St. Louis 7, Mo.

SHOW YOUR MOTOR REPAIR FRIENDS HOW FUSETRON FUSES

can help them get and hold profitable business

The above condensed message on FUSETRON dual-element fuses can furnish you with the basis for a real sales talk.

It shows how a New England motor repair shop has taken advantage of FUSETRON dual-element fuses to serve its customers and build the kind of good will that brings back repeat business.

By repeating this actual experience of the New England Electric Motor Exchange to men who are interested in the protection of motors you may do them a real favor and at the same time expose yourself to some profitable fuse business.

Bussmann Mfg. Co., St. Louis 7, Mo.
Division McGraw Electric Company

ANOTHER OUTSTANDING DEVELOPMENT BY THE MAKERS OF BUSS FUSES

FOR INSTALLATION THROUGHOUT THE ENTIRE ELECTRICAL SYSTEM

FUSETRON DUAL-ELEMENT FUSES